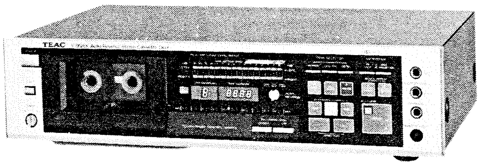
TEAC®



SERVICE MANUAL

V-95RX / V-90R

Auto-Reverse Stereo Cassette Deck

A domestic, Japan, model of the V-95RX (V-90R) is the V-R1 (V-R2).

Effective: April, 1982 B-10186

5704013000

1 SPECIFICATIONS AND SERVICE DATA

Notes:

1. Improvements may result in changes in specifications and service data.
2. 0 dB is referenced to 0.775 V in this manual.

SPECIFICATIONS

Track system		4-track, 2-channel stereo
Heads		3: 2 Erase and Record/Playback
Type of tape		Cassette tape, C-60 and C-90 (Philips type)
Tape speed		4.76 cm/s (1-7/8 ips)
Input (level and impedance)		
MIC:	Specified input level:	–57 dB (1.09 mV)/10 kohms
	Minimum input level:	–67 dB (346 μV)
LINE IN:	Specified input level:	–9 dB (275 mV)/50 kohms
	Minimum input level:	–19 dB (86.9 mV)
Output (level and impedance)		
OUTPUT:	Specified output level:	–5 dB (436 mV)/50 kohms
	Max. output level (V-95RX):	–2.5 dB (581 mV)
PHONES:	Specified output level:	–18 dB (97.5 mV)/8 ohms
Equalization		
METAL:		3180 μs + 70 μs
Co (CrO$_2$):		3180 μs + 70 μs
NORMAL:		3180 μs + 120 μs
Head configuration		1/2-track, 1-channel erase head (2 used) 1/4-track, 2-channel record/playback head
Motors		1 DC servo motor (for capstan drive) 1 DC motor (for reel drive) 1 DC motor (for ancillary control)
Bias method		AC bias recording
Operation position		Horizontal
Power requirements		100/120/220/240 V AC, 50/60 Hz, 25 W (General export models) 120 V AC, 60 Hz, 25 W (U.S.A./Canada) 220 V AC, 50 Hz, 25 W (EUR(ope)) 240 V AC, 50 Hz, 25 W (U.K./Australia)
Weight		6.3 kg (13-14/16 lbs.) net for V-95RX 6.0 kg (13-4/16 lbs.) net for V-90R
Dimensions		See Fig. 2-2

SERVICE DATA

MECHANICAL

Tape speed deviation		3,000 Hz ±45 Hz
Tape speed drift		30 Hz
Wow and flutter		
	Playback:	0.07% (WRMS)
	Record/playback:	0.25% (RMS)
Pinch roller pressure		290 g ± 40 g (8.8 oz to 11.6 oz)
Reel Torque		
	Take-up in (FWD/REV):	45 to 65 g-cm (0.62 to 0.90 oz-inch)
	Supply in (FWD/REV):	2 to 4.5 g-cm (0.028 to 0.062 oz-inch)
	F.F. and REW:	80 to 150 g-cm (1.1 to 2.1 oz-inch)
Fast winding time		90 seconds for MTT-501 (C-60)

ELECTRICAL

Frequency response		See Figs. 5-3 to 5-6.
Signal-to-noise ratio		
	Playback:	NORMAL: 46 dB min.
	Overall:	METAL, Co (CrO$_2$): 44 dB min. NORMAL: 43 dB min.
Erase efficiency		65 dB min. at 1 kHz (measured with input 10 dB higher than the specified input level)
Channel separation		30 dB min. at 1 kHz
Adjacent track crosstalk		40 dB min. at 125 Hz
Total harmonic distortion		2.2% or less with METAL and Co (CrO$_2$) tapes 2.0% or less with NORMAL tape

- Dolby Noise Reduction System manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
- dbx Noise Reduction System made under license from dbx, Incorporated. The name "dbx" and the dbx symbol are trademarks of dbx, Incorporated.

CAUTION

⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components — refer to the appropriate parts list and ensure exact replacement.

2 REMOVAL OF EXTERNAL COMPONENTS

Disassemble in number-order

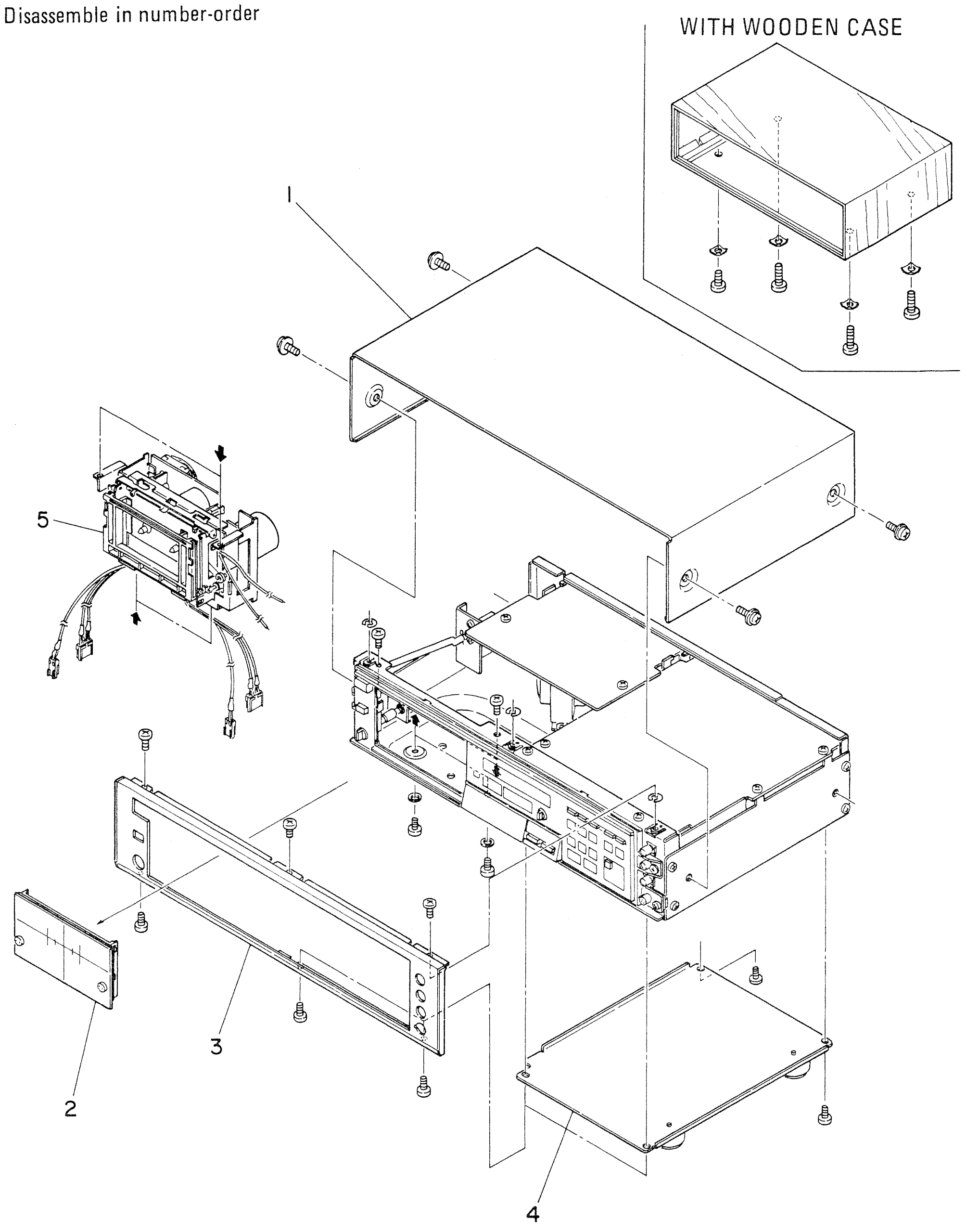
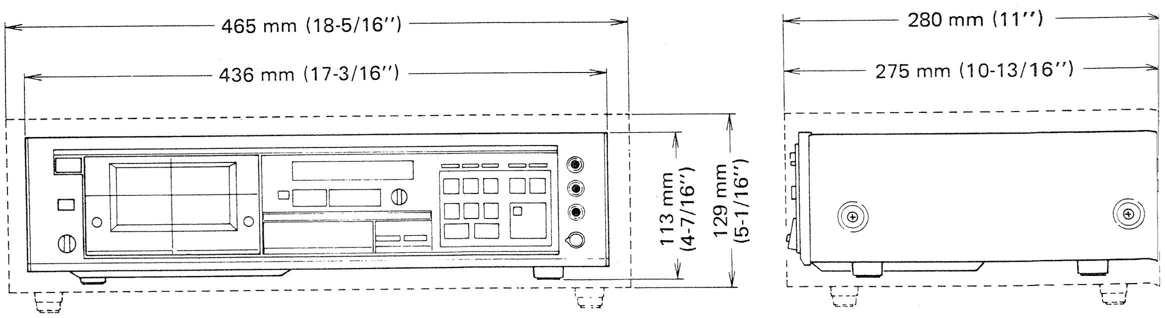

WITH WOODEN CASE
1
2
3
4
5

Fig. 2-1


465 mm (18-5/16'')
436 mm (17-3/16'')
113 mm (4-7/16'')
129 mm (5-1/16'')
280 mm (11'')
275 mm (10-13/16'')

Broken line indicates the dimensions of some general export models.

Fig. 2-2 Dimensions

3 PARTS LOCATION

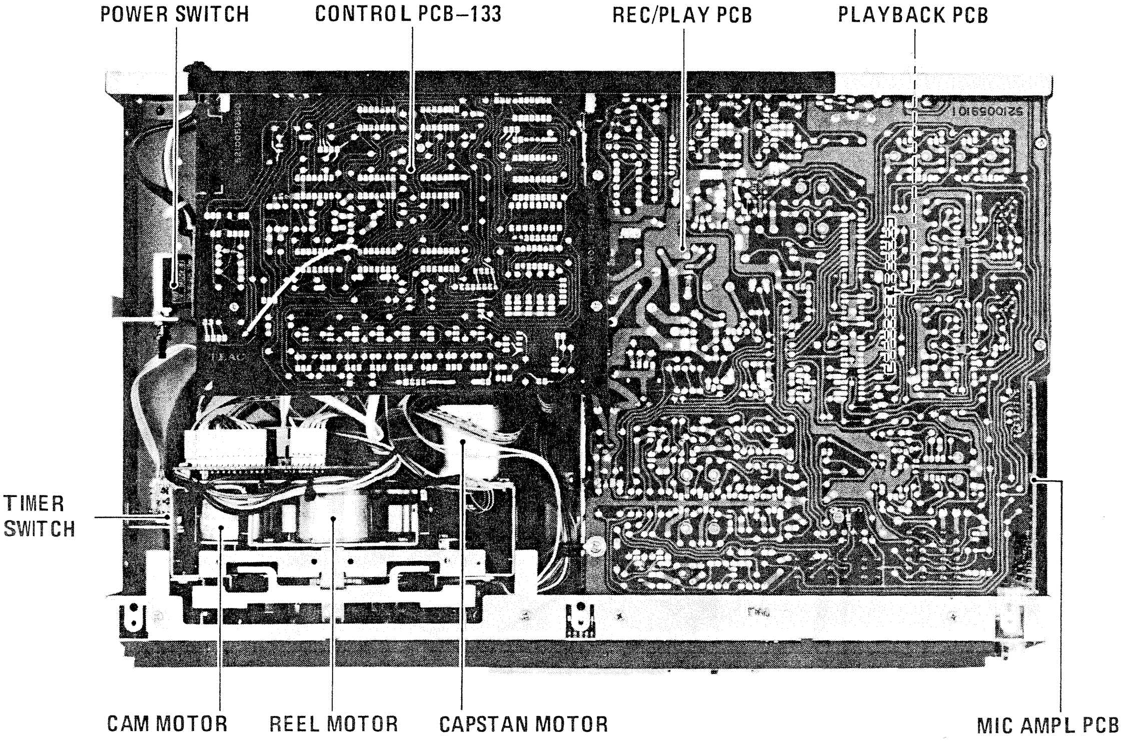

POWER SWITCH
CONTROL PCB-133
REC/PLAY PCB
PLAYBACK PCB
TIMER SWITCH
CAM MOTOR
REEL MOTOR
CAPSTAN MOTOR
MIC AMPL PCB

Fig. 3-1 Top view (V-95RX)

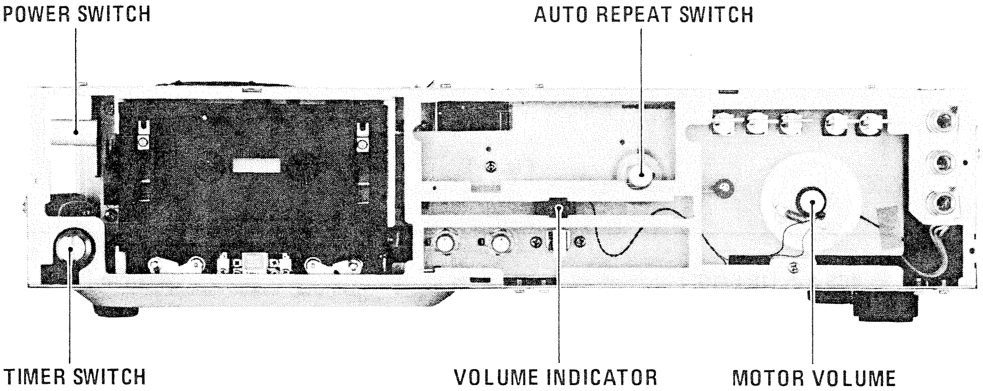

POWER SWITCH
AUTO REPEAT SWITCH
TIMER SWITCH
VOLUME INDICATOR
MOTOR VOLUME

Fig. 3-2 Front view (V-95RX)

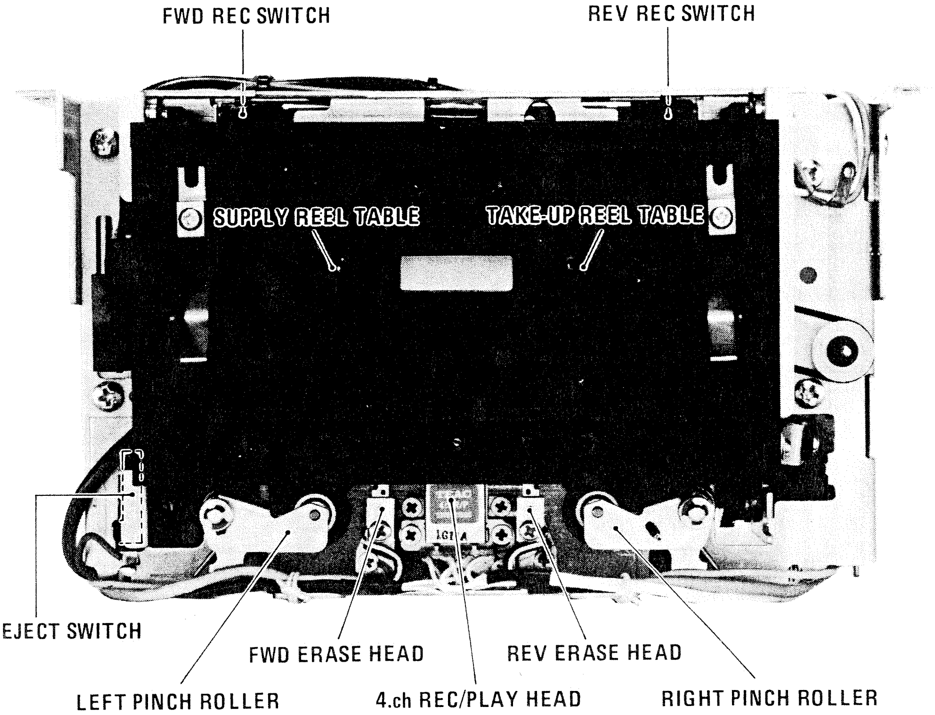

FWD REC SWITCH
REV REC SWITCH
SUPPLY REEL TABLE
TAKE-UP REEL TABLE
EJECT SWITCH
FWD ERASE HEAD
REV ERASE HEAD
LEFT PINCH ROLLER
4.ch REC/PLAY HEAD
RIGHT PINCH ROLLER

Fig. 3-3 Transport front view

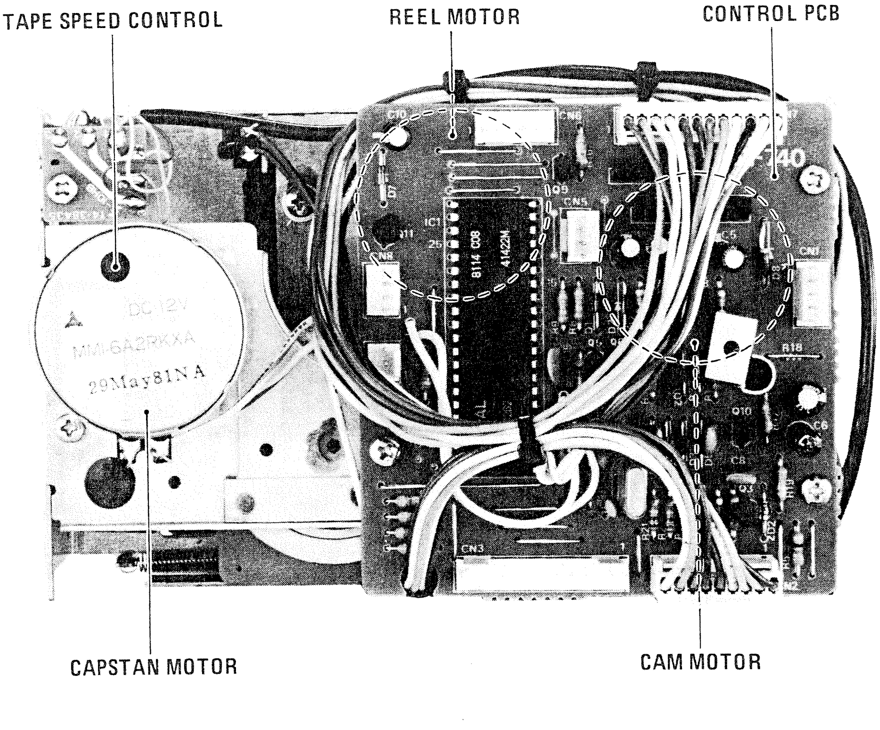

TAPE SPEED CONTROL
REEL MOTOR
CONTROL PCB
CAPSTAN MOTOR
CAM MOTOR

Fig. 3-4 Transport rear view

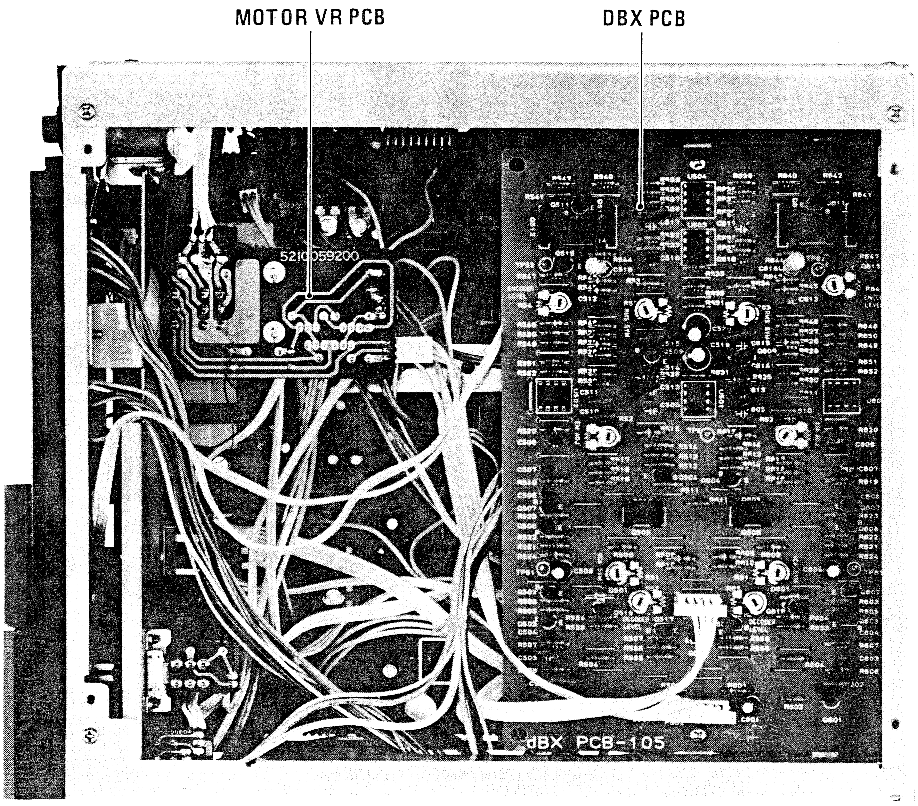

MOTOR VR PCB
DBX PCB
5210059200
dBX PCB-105

Fig. 3-5 Right side of bottom view (V-95RX only)

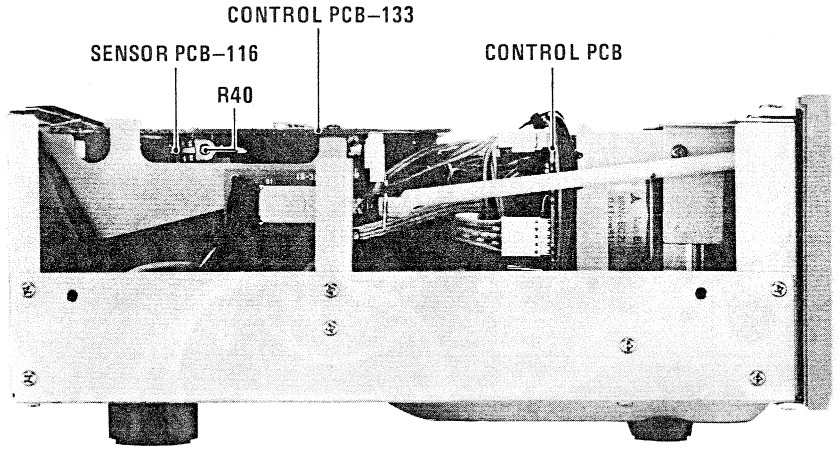

CONTROL PCB–133
SENSOR PCB–116
R40
CONTROL PCB

Fig. 3-6 Left side view

4 MECHANICAL CHECKS AND ADJUSTMENTS

4-1 REEL TORQUE

1. Load the cassette torque meter on the deck and read the pointer indication on the dial scale of the meter for each tape transport operation. The measured torque should be within the following values:

Take-up in (FWD/REV):	45 to 65 g-cm (0.62 to 0.90 oz-inch)
Supply in (FWD/REV):	2 to 4.5 g-cm (0.028 to 0.062 oz-inch)
F.F. and REW:	80 to 150 g-cm (1.1 to 2.1 oz-inch)

4-2 PINCH ROLLER PRESSURE

1. With the cassette holder closed and no tape loaded, put the deck in the forward play mode.
2. Hook a spring scale on the right pinch roller assembly.
3. Pull the scale down until there is sufficient force to separate the pinch roller from the capstan shaft.
4. Release the pressure until the pinch roller makes just enough contact with the capstan shaft for the pinch roller to begin to turn. At this point, note the reading on the scale. It should be 290 g ± 40 g (8.8 oz to 11.6 oz.)
5. Repeat the above procedure with the following exceptions.

Tape motion:	Reverse play mode
Pinch roller:	Left side

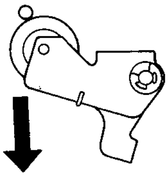


Fig. 4-1

4-3 TAPE SPEED

Note: The following checks should be performed for both forward and reverse play operations.

1. Connect a frequency counter to the deck as shown in Fig. 4-2.
2. Play a tape for more than five minutes to warm up the deck, then load a TEAC MTT-111 test tape containing a 3000 Hz test tone and play the test tape.
3. While the tape is playing, use a common slotted screwdriver with the handle completely insulated from the blade and adjust the control on the capstan motor (see Fig. 3-4) for a reading of 3000 Hz ± 5 Hz on the frequency counter.
4. Play the tape at the beginning and at the end, and check that the speed deviation is within the prescribed limits by observing that the reading on the frequency counter never deviates more than ± 45 Hz from 3000 Hz, nor drifts more than 30 Hz at any given time.

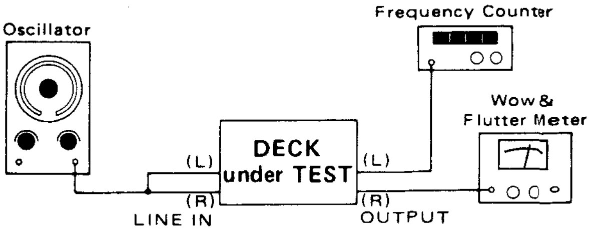


Fig. 4-2

4-4 WOW AND FLUTTER

Notes: 1. The following procedures should be performed in both the forward and reverse modes.
2. These measurements should be made at the beginning, middle, and end of the tape.

1) PLAYBACK

1. Connect a wow-and-flutter meter to the deck as shown in Fig. 4-2.
2. Load and play a TEAC MTT-111 test tape.
3. Check that the reading on the wow-and-flutter meter is within 0.07% (WRMS).

2) RECORD/PLAYBACK

4. Load a TEAC MTT-501 test tape (blank) and record a 3000 Hz signal.
5. Rewind the tape to the beginning of the recorded section and play it back.
6. The wow and flutter should not be more than 0.25% (RMS).

4-5 HEAD ALIGNMENT

OLDER TYPE

V-95RX: Ser. No. 2440 and before
V-90R: Ser. No. 3470 and before

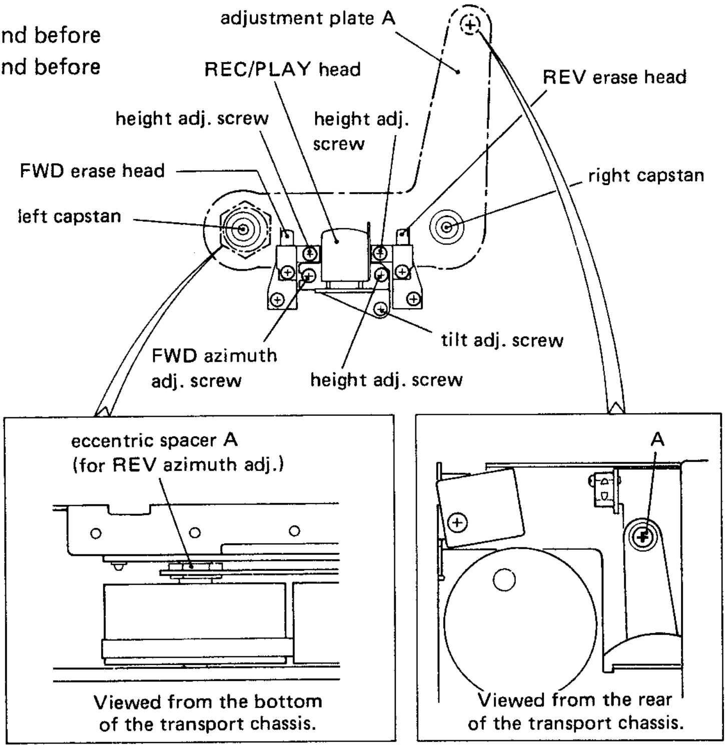

adjustment plate A
REC/PLAY head
REV erase head
height adj. screw
height adj. screw
FWD erase head
right capstan
left capstan
tilt adj. screw
FWD azimuth adj. screw
height adj. screw
eccentric spacer A (for REV azimuth adj.)
A
Viewed from the bottom of the transport chassis.
Viewed from the rear of the transport chassis.

Fig. 4-3 Head construction of the older type

NEWER TYPE

V-95RX: Ser. No. 2441 and after
V-90R: Ser. No. 3471 and after

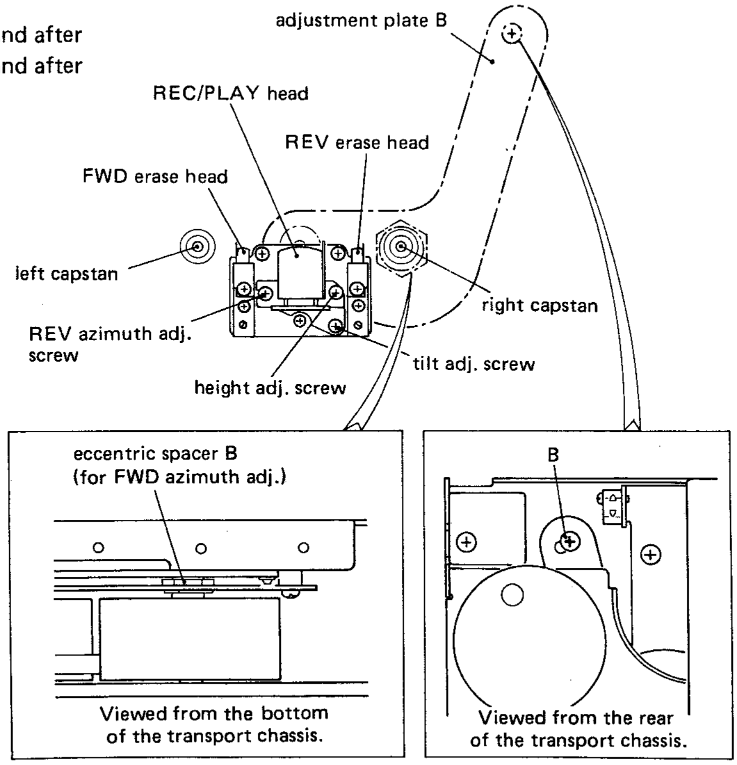

adjustment plate B
REC/PLAY head
REV erase head
FWD erase head
left capstan
right capstan
REV azimuth adj. screw
tilt adj. screw
height adj. screw
eccentric spacer B (for FWD azimuth adj.)
B
Viewed from the bottom of the transport chassis.
Viewed from the rear of the transport chassis.

Fig. 4-4 Head construction of the newer type

Notes: 1. V-95RX/V-90R are divided into older and newer types with respect to the defference in head configuration and mounting method. To distinguish them, refer to Figs. 4-3 and 4-4. The alignment procedure is explained for the older type. For the newer type, the description below can be applied by changing the words in [ ].

2. To perform this section alignment, special tools (jigs) are required.

   Extension cable assembly (TEAC P/N 5772906200)
   Base plate check jig* (TEAC P/N 5030610000)
   Guide height check jig* (TEAC P/N 5030613100)
   *These jigs are the ones used for C-1, C-2 and A-800.
   Adjustment spanner (TEAC P/N 5736006800)

1. To facilitate the process, remove the tape transport chassis from the main chassis. Refer to Fig. 2-1.
2. Using the extension cable assembly, connect the tape transport chassis connectors and the main chassis connectors.
3. Connect the deck to the test equipment as shown.
4. Press the EJECT button to open the cassette holder.
5. Insert the base plate check jig into the cassette holder very carefully. When doing this, hold the jig in place until its bottom edge rests on the stopper at the bottom of the cassette holder.
6. Close the cassette holder and press down firmly on the plate jig.
7. Set in the forward or reverse play mode to raise the heads.
8. Using the height jig, adjust the REC/PLAY head's guide height by turning the height adj. screw.
   When doing this, note that the final turn of the screw is in the clockwise direction. Do the same for all subsequent adjustments of screws.
9. Turn the tilt adj. screw of the REC/PLAY head so that the head surface is exactly perpendicular to the plate jig.
10. Repeat steps 8 and 9 until both height and tilt adjustments are satisfied.
11. Load a TEAC MTT-150 test tape and play it in the forward [reverse] direction.
12. Make sure that the phase relationship between L-ch and R-ch signals is within 45 degrees on the oscilloscope.
13. Load a TEAC MTT-356 test tape and play its 10 kHz signal section in the forward [reverse] direction.
14. Turn the REC/PLAY head's FWD [REV] azimuth adj. screw so that the playback output levels of both channels are at the maximum value.
15. Loosen the screw indicated by A in Fig. 4-3 [by B in Fig. 4-4].
16. Repeat steps 11 through 14 with the exceptions below.
    To turn the eccentric spacer, use the adjustment spanner especially prepared by TEAC.
    Tape motion: Reverse [forward] play mode
    Azimuth adjuster: Eccentric spacer A in Fig. 4-3
    [Eccentric spacer B in Fig. 4-4]
17. Recheck whether the REC/PLAY head's azimuth in forward [reverse] play is correct.
18. After completion of both forward and reverse azimuth adjustments, retighten screw A [B].

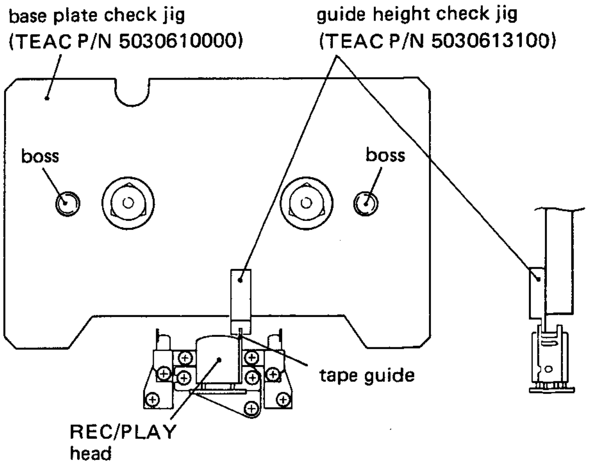


Fig. 4-5 Height adjustments

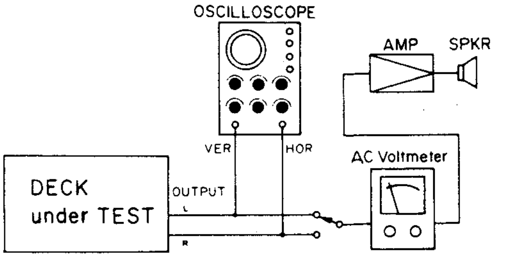


Fig. 4-6 Test setup for azimuth check

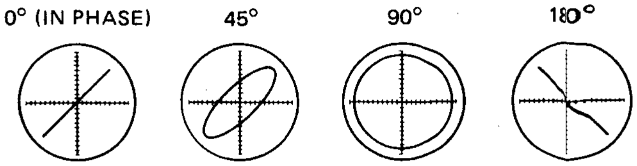


Fig. 4-7 Confirming phase relationship

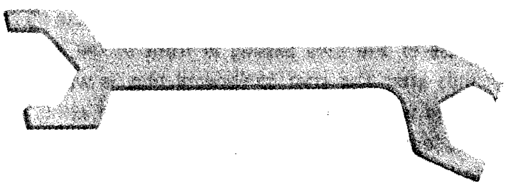


Fig. 4-8 Adjustment spanner (TEAC P/N 5736006800)

4-6 QUICK-REVERSE OPERATION

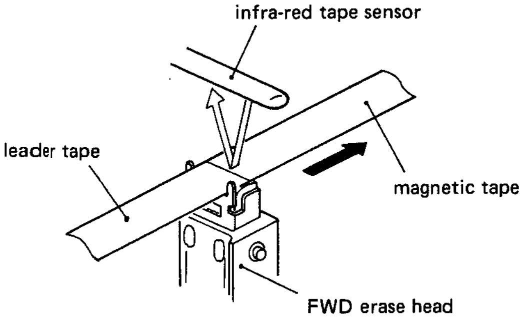

infra-red tape sensor
leader tape
magnetic tape
FWD erase head

Fig. 4-9

4-6-1 OPERATING CONDITION

In the forward play mode with the AUTO-REVERSE switch set to ⊐ or ⊂⊃, when the splicing tape passes in front of the erase head (from which the infra-red tape sensor is located slightly away), the following operation should be performed.

- Until the splicing tape passes in front of the erase head for 10 seconds after the start of the forward play mode. . . . . the deck should not be set in the reverse play mode.
- When the splicing tape passes in front of the erase head for more than 40 seconds after the start of the forward play mode. . . . . . the deck should be set in the reverse play mode.

It should, however, be noted that during the 10 second to 40 second period after the start of forward play, changing to the reverse play mode may be regarded as a normal operation.

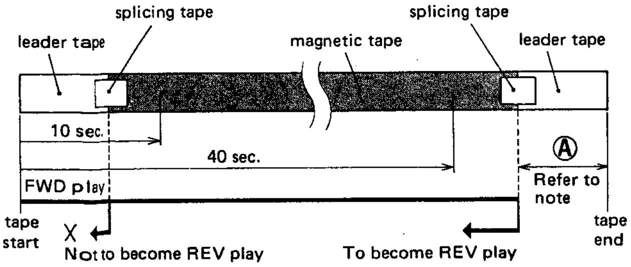

splicing tape
splicing tape
leader tape
magnetic tape
leader tape
10 sec.
40 sec.
Ⓐ
Refer to note
FWD play
tape start
X
Not to become REV play
To become REV play
tape end

Fig. 4-10 A term of quick-reverse

Note: It is not specially prescribed that quick-reverse operation in the case of the tape passing in front of the erase head 10 seconds after the start of forward play is within the range indicated with Ⓐ in Fig. 4-10. In this case, either the quick-reverse operation or the tape end stop detection may be permitted to permit the deck to be set to the reverse play mode.

4-6-2 CIRCUIT ADJUSTMENT

The following procedure is for adjustment of the quick-reverse circuit (sensor PC board).

1. Turn semi-fixed resistor (R-40) on the sensor PC board fully clockwise.
2. Load a TEAC MTT-501 test tape, play its magnetic tape section in the forward direction, then measure the emitter voltage of the transistor Q450.
3. Using the following table, determine the setting value of the Q450's emitter voltage corresponding to the above-measured value. During forward play, turn R40 to obtain the setting value.

EMITTER VOLTAGE OF Q450

MEASURED VALUE	SETTING VALUE	MEASURED VALUE	SETTING VALUE	MEASURED VALUE	SETTING VALUE
1.2	1.20	2.2	1.72	3.2	2.18
1.3	1.20	2.3	1.77	3.3	2.21
1.4	1.20	2.4	1.82	3.4	2.24
1.5	1.28	2.5	1.87	3.5	2.27
1.6	1.34	2.6	1.92	3.6	2.30
1.7	1.41	2.7	1.97	3.7	2.30
1.8	1.48	2.8	2.02	3.8	2.36
1.9	1.54	2.9	2.06	3.9	2.38
2.0	1.60	3.0	2.10	4.0	2.40
2.1	1.66	3.1	2.14		

4. When the measured value is below 1.2 V, perform the following change. Refer to Fig. 4-11.
   1) Remove R451 (33k ohms) on the sensor PC board.
   2) Jumper R40's terminal 3 and terminal 2.
   3) Load a MTT-501 tape, then make a coarse adjustment of R40 so that, during forward play of the MTT-501's magnetic tape section, Q450's emitter voltage becomes approx. 1.4V.
   4) Perform fine-adjustment of R40 so that this voltage produces approx. a 200 mV variation between the stop mode and the forward play mode.
   5) Confirm that, during forward play of the MTT-501 tape, the deck performs a quick-reverse operation at the spliced portion of the MTT-501's magnetic tape and leader tape.

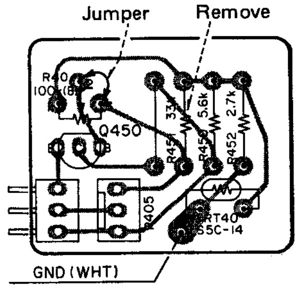

Jumper
Remove
R40
100(B)
2
Q450
B
33k
5.6k
2.7k
R451
R45
R452
R405
RT40
S5C-14
GND (WHT)

Fig. 4-11 Sensor PC board (foil side)

5. If the measured value is above 4.1 V, perform the following change.
   1) Change R451's value on the sensor PC board from 33k ohms to 8.2k ohms.
   2) Load the MTT-501 tape, then adjust R40 so that, during forward play of the MTT-501's magnetic tape section, Q450's emitter voltage becomes approx. 1.4 V.
   3) Confirm that this voltage has approx. 300 mV to 400 mV variation between the stop mode and the forward play mode.

4-7 CAM GEARS

The mounting position relationship among the three cam gears (cam gear F, cam gear R and relay gear) is special. Therefore, their installation should be performed using the following procedure.

1. Move pinch roller actuating lever F and head base assembly as shown by the arrows.
2. Mount cam gear F so that its hole indicated with * lines up with the hole on the transport chassis. Then relax the above-moved two parts.
3. Mount the other two gears by lining up their markers as shown.

Note: When mounting cam gear R, pinch roller actuating lever R should be moved in the direction of the arrow.

4-8 VOLTAGE CONVERSION (GENERAL EXPORT MODELS ONLY)

1. Always disconnect the power cord before making these adjustments.
2. Remove the top cover* of the deck by removing the screws from the sides.
3. Locate the voltage selector near the power transformer as shown in the illustration.
4. Loosen the two screws in the jumper bar and move the bar so that it jumpers the terminals marked with the required voltage (100, 120, 220, or 240).
5. Retighten the screws.
6. Replace the top cover*.

*Decks sold in some limited areas only have a wooden case which must be removed using the screws on the bottom of the deck before setting the voltage selector.

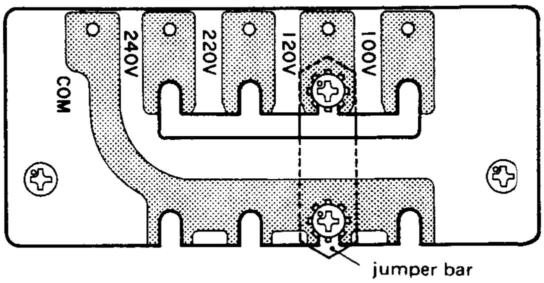

COM
240V
220V
120V
100V
jumper bar

Fig. 4-13

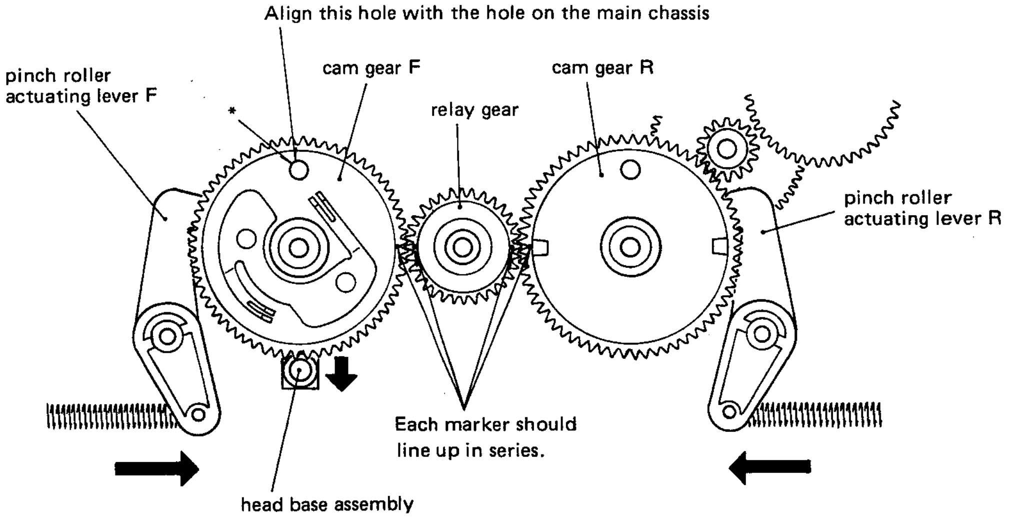

Viewed from the rear of the transport chassis
Align this hole with the hole on the main chassis
pinch roller actuating lever F
*
cam gear F
relay gear
cam gear R
pinch roller actuating lever R
Each marker should line up in series.
head base assembly

Fig. 4-12 Cam gears

5 ELECTRICAL CHECKS AND ADJUSTMENTS

PRECAUTIONS

1. Before performing adjustments and checks, clean and demagnetize the entire tape path.
2. Make sure that the deck is properly set for the voltage in your locality.
3. In general, adjustments and checks should be made in the order of the forward play (or record) mode, then the reverse play (or record) mode, and in the order of the L-ch then the R-ch. Double REF. Nos. and test point designations indicate L-ch/R-ch. (Example: R11/R21)
4. 0 dB is referenced to 0.775 V. If an AC voltmeter that references 0 dB to 1 V is used, appropriate compensation should be made.
5. The AC voltmeter used in the procedures must have an input impedance of 1 Mohm or more.
6. Note the "deck settings" at the top of each chart. The settings apply to all checks for a specific chart unless explicitly stated otherwise.

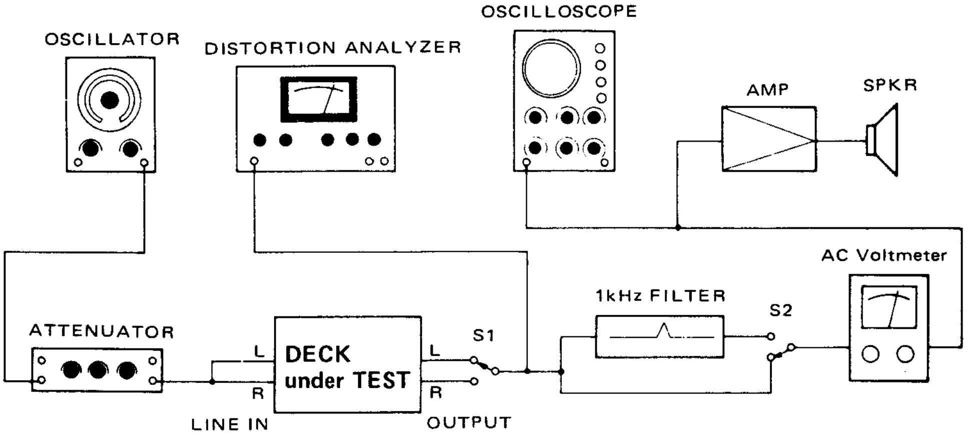


Fig. 5-1 Basic test setup

5-1 PLAYBACK PERFORMANCE

V-95RX settings:

TAPE SELECTOR sw: METAL
NR SYSTEM sw: OUT

V-90R settings:

TAPE SELECTOR sw: METAL
DOLBY NR sw: OUT

TEAC test tapes:

MTT-150: For Dolby level calibration
MTT-356: For playback frequency response check for METAL, Co (CrO_2)
MTT-501: For S/N check with NORMAL

ITEM	PREPARATION/SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT: RESULT	REMARKS
1. REC/PLAY head azimuth	Check REC/PLAY head azimuth by referring to section 4-5 on pages 8 and 9.				
2. Playback level	FWD play mode	MTT-150	R10/R20	DOLBY TP.L/TP.R: 580 mV (–2.5 dB)	
			OUTPUT cont.	OUTPUT: –5 dB (436 mV)	V-95RX only • Specified setting of OUTPUT cont.
			Check	OUTPUT: –5 dB ±1 dB (388 mV to 489 mV)	V-90R only
	REV play mode		R11/R21	DOLBY TP.L/TP.R: 580 mV (–2.5 dB)	
			Check	OUTPUT: –5 dB ±1 dB (388 mV to 489 mV)	
	IMPORTANT: Do not move the OUTPUT control (V-95RX only) during any subsequent process.				

ITEM	PREPARATION/SETTING		INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT: RESULT	REMARKS
3. PEAK PROGRAM LEVEL METER	FWD play mode		MTT-150	R12/R22	METER indication: 0 dB	
4. Frequency response	FWD & REV play modes	TAPE SELECTOR: METAL	MTT-356	Check	OUTPUT: Fig. 5-3	
		TAPE SELECTOR: NORMAL	MTT-356 (10 kHz)		OUTPUT: When the TAPE SELECTOR is changed from METAL to NORMAL, 10 kHz output should be approx. 4 dB higher than measured in the above step.	
5. Signal-to-noise ratio	FWD & REV play modes TAPE SELECTOR: NORMAL		Fully-erased MTT-501 tape (Use bulk tape eraser)	Check	OUTPUT: 46 dB min.	Ratio of spec. output of −5 dB to noise

5-2 MONITOR PERFORMANCE

V-95RX settings:

Record-pause mode
NR SYSTEM sw: OUT
REC BAL cont.: Center (click) position
OUTPUT cont.: Specified position (item 2)

V-90R settings:

Record-pause mode
DOLBY NR sw: OUT
MPX sw: OUT

ITEM	PREPARATION/SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT: RESULT	REMARKS
6. Min. input level	RECORDING LEVEL cont. (V-95RX): Max. Record Level cont. (V-90R): Max.	MIC: 400 Hz/−67 dB (346 μV)	Check	OUTPUT: −5 dB ±3 dB (308 mV to 615 mV)	MIC min. input level
		LINE IN: 400 Hz/−19 dB (86.9 mV)			LINE min. input level
7. Specified LINE input level	—	LINE IN: 400 Hz/−9 dB (436 mV)	RECORDING LEVEL cont.	DOLBY TP. L/TP. R: 580 mV (−2.5 dB)	Specified setting of RECORDING LEVEL (or Record Level) cont. V-95RX
			Record Level cont.		V-90R
			V-90R: Record Level control position difference between channels should be ½ scale or less.		
			Check	OUTPUT: −5 dB ±1 dB (388 mV to 489 mV)	
	IMPORTANT: Do not change the setting of the RECORDING LEVEL (or Record Level) control after establishing the setting as above.				
8. PEAK PROGRAM LEVEL METER	—	LINE IN: 400 Hz/−9 dB (436 mV)	Check	METER indication: 0 dB ±1 dB	
9. PHONES output level	Connection: Fig. 5-2	LINE IN: 400 Hz/−9 dB (436 mV)	Check	PHONES: −18 dB ±3 dB (69.0 mV to 138 mV)	

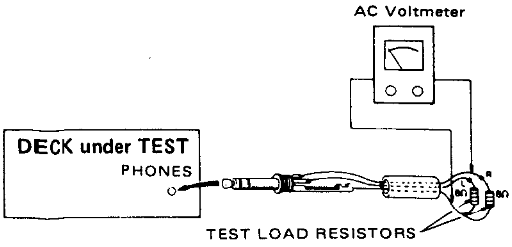


Fig. 5-2 Test setup for PHONES check

5-3 RECORDING PERFORMANCE

V-95RX settings:

NR SYSTEM sw: OUT
REC BAL cont.: Center (click) position
RECORDING LEVEL cont.: Specified position (item 7)
OUTPUT cont.: Specified position (item 2)

V-90R settings:

DOLBY NR sw: OUT
MPX sw: OUT
Record Level cont.: Specified position (item 7)

TEAC test tapes:

MTT-5061: For record test with Co (CrO_2)
MTT-501: For record test with NORMAL
MTT-5072: For record test with METAL

ITEM	PREPARATION/SETTING		INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT: RESULT	REMARKS
10. Bias trap	Record-pause mode		LINE IN: No signal	U107/U207	BIAS TRAP TP.L/TP.R Min. reading	
11. Record bias	Turn trim pots R18/R28, R19/R29 fully clockwise for each trim pot to obtain minimum resistance value (viewed from REC/PLAY AMPL PCB foil side).					
	FWD & REV record/play modes	TAPE SELECTOR: METAL Tape: MTT-5072	LINE IN: 400 Hz & 6.3 kHz alternately/−42 dB (6.15 mV)	R18/R28 (FWD) R19/R29 (REV)	OUTPUT: Nearly equal level at both frequencies	
		TAPE SELECTOR: Co (CrO_2) Tape: MTT-5061		Check		
		TAPE SELECTOR: NORMAL Tape: MTT-501		R30		... For L & R-ch in FWD & REV
12. Record level	FWD & REV record/play modes	TAPE SELECTOR: METAL Tape: MTT-5072	LINE IN: 400 Hz/−12 dB (195 mV)	R16/R26 (FWD) R17/R27 (REV)	OUTPUT: −8 dB (308 mV)	
		TAPE SELECTOR: Co (CrO_2) Tape: MTT-5061		Check	OUTPUT: −8 dB ±1.5 dB (259 mV to 367 mV)	
		TAPE SELECTOR: NORMAL Tape: MTT-501				
13. Total harmonic distortion	Same as 12 above		LINE IN: 400 Hz/−12 dB (195 mV)	Check	OUTPUT: 2.2% or less [METAL, Co (CrO_2)] 2.0% or less [NORMAL]	
14. Frequency response	Same as 12 above		LINE IN: Required signal/ −42 dB (6.15 mV)	Check	OUTPUT: Fig. 5-4 to 5-6 If frequency response is out of specification, recheck "11. Record bias" and "13. Total harmonic distortion".	
15. Signal-to-noise ratio	Same as 12 above		LINE IN: 1 kHz/−9 dB (275 mV) ↓ No signal	Check	OUTPUT: 44 dB min. [METAL, Co (CrO_2)] 43 dB min. [NORMAL]	Ratio of speci fied output o −5 dB to nois

ITEM	PREPARATION/SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT: RESULT	REMARKS
16. Erase efficiency	• Connection is same as in Fig. 5-1, but engage 1-kHz filter. • Record a 1-kHz signal in FWD (REV) direction. Rewind (wind) tape to midpoint of recorded portion. Record a "no signal" portion in FWD (REV) direction. Find the difference between the 1-kHz portion and the "no-signal" portion.				
	FWD & REV record/play modes {TAPE SELECTOR: METAL Tape: MTT-5072 {TAPE SELECTOR: NORMAL Tape: MTT-501	LINE IN: 1 kHz/+1 dB (0.869 V) ↓ No signal	Check	OUTPUT: 65 dB min. ratio	Ref. output level: +5 dB (1.38V)
17. REC MUTE function	• Connection: Fig. 5-1, but engage 1-kHz filter. • Record a 1-kHz signal for several seconds in the FWD (REV) direction. Then push the REC MUTE button to provide four seconds of blank space on the tape(At this time, make sure the REC button indicator lamp flashes on and off). After the deck automatically goes into the record-pause mode, rewind (wind) and play the tape in FWD (REV) direction. Find the difference between the 1-kHz portion and the "no signal" portion.				
	FWD & REV record/play modes TAPE SELECTOR: Co (CrO_2) Tape: MTT-5061	LINE IN: 1 kHz/+1 dB (0.869 V) ↓ No signal	Check	OUTPUT: 65 dB min. ratio	Ref. output level: +5 dB (1.38V)
18. Channel separation	• Connection: Fig. 5-1, but do not connect LINE IN (R), and engage 1-kHz filter. • Set the deck to FWD (REV) record mode. Find the difference between the 1-kHz recorded portion (L-ch) and the "no signal" portion (R-ch).				
	FWD & REV record/play modes TAPE SELECTOR: Co (CrO_2) Tape: MTT-5061	LINE IN: L-ch: 1 kHz/−9 dB (275 mV) R-ch: No signal	Check	OUTPUT: 30 dB min. ratio	
19. Adjacent track crosstalk	• Connection: Fig. 5-1, but do not connect LINE IN (L) and OUTPUT (L). • Record a 125-Hz signal on the R-ch in FWD (REV) direction and note the output level. Invert the tape and play the R-ch track in the FWD (REV) direction. Check the leakage level against the output reference of the previously recorded portion.				
	FWD & REV record/play modes TAPE SELECTOR: Co (CrO_2) Tape: MTT-5061	LINE IN: L-ch: No signal R-ch: 125 Hz/−9 dB (275 mV)	Check	OUTPUT: 40 dB min. ratio	
20. DOLBY NR effect	V-95RX: Record a 1-kHz signal in the FWD direction with the NR SYSTEM left switch in OUT and the right switch in DOLBY NR. Play this portion in the FWD direction with the left switch set to OUT and set to IN. Obtain the difference in the output level between the OUT and IN positions. Repeat the above process using a 10-kHz signal.		V-90R: Record a 1-kHz signal in the FWD direction with the DOLBY NR switch OUT. Play this portion in the FWD direction with the DOLBY NR switch set to OUT and set to IN. Obtain the difference in the output level between the OUT and IN positions. Repeat the above process using a 10-kHz signal.		
	FWD record/play mode TAPE SELECTOR: Co (CrO_2) Tape: MTT-5061	LINE IN: 1 kHz/−29 dB (27.5 mV)	Check	OUTPUT: Variation 3 dB ~ 8 dB	
		LINE IN: 10 kHz/−39 dB (8.69 mV)		OUTPUT: Variation 8 dB ~ 12 dB	

5-4 DBX PERFORMANCE (V-95RX ONLY)

Note: Test this performance only after you are sure that the "5-5 DBX PCB ADJUSTMENT" is correct.

V-95RX settings:

NR SYSTEM sw: DBX
REC BAL cont.: Center (click) position
RECORDING LEVEL cont.: Specified position (item 7)
OUTPUT cont.: Specified position (item 2)

TEAC test tapes:

MTT-5061: For record test with Co (CrO_2)
MTT-501: For record test with NORMAL
MTT-5072: For record test with METAL

ITEM	PREPARATION/SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT: RESULT	REMARKS
21. Encoding level setting	Record-pause mode	LINE IN: 1 kHz/−9 dB (275 mV)	Check	Term. 1(6) of P502 −2.5 dB (580 mV)	
	If, in the above step, the RESULT is out of specification, correct using the RECORDING LEVEL control so that the correct value is obtained when the control is in the specified position (item 7).				
	Record-pause mode	LINE IN: 1 kHz/−14.5 dB (146 mV)	R54/R64	TP51/TP61 on dbx PCB: −8 dB (308 mV)	Reference 1
22. Encoder operation check (level)	Record-pause mode	LINE IN: 1 kHz/−74.5 dB (146 µV)	Check	TP51/TP61 on dbx PCB: −30 dB ±0.5 dB variation from Ref. 1	
		LINE IN: 1 kHz/+5.5 dB (1.46 V)		TP51/TP61 on dbx PCB: +10 dB variation from Ref. 1	
23. Encoder operation check (frequency)	Record-pause mode	LINE IN: 100 Hz/−14.5 dB (146 mV)	Check	TP51/TP61 on dbx PCB: +0.5 dB ±1 dB deviation from Ref. 1	
		LINE IN: 10 kHz/−14.5 dB		TP51/TP61 on dbx PCB: −2.8 dB ±1 dB deviation from Ref. 1	
24. Decoding level setting	• Record a 1 kHz signal with the NR SYSTEM switch OUT. Rewind and play the recorded portion. Note the off-the-tape level from OUTPUT ..... (1). Repeat the above process with the NR SYSTEM switch set to "DBX". Note the off-the-tape level ..... (2). Compare the difference between (1) and (2). If ±1 dB or more, correct by R55/R65 using (1) as Reference.				
	FWD record/play mode TAPE SELECTOR: METAL Tape: MTT-5072 NR SYSTEM: OUT	LINE IN: 1 kHz/−14.5 dB (146 mV)	Check	OUTPUT: Note the off-the-tape level	Reference 2
	NR SYSTEM: DBX	LINE IN: 1 kHz/−14.5 dB	Check (R55/R65)	OUTPUT: ±1 dB from Ref. 2	
25. Distortion	FWD & REV record/play modes Measure the off-the-tape level TAPE SELECTOR: METAL Tape: MTT-5072 TAPE SELECTOR: Co (CrO_2) Tape: MTT-5061 TAPE SELECTOR: NORMAL Tape: MTT-501	LINE IN: 400 Hz/−12 dB (195 mV)	Check	OUTPUT: 1.5% or less	
26. Signal-to-noise ratio	Same as above	LINE IN: 1 kHz/−9 dB (275 mV) ↓ No signal	Check	OUTPUT: 65 dB min. ratio	Ratio of 1 kHz output (−5 dB) to noise

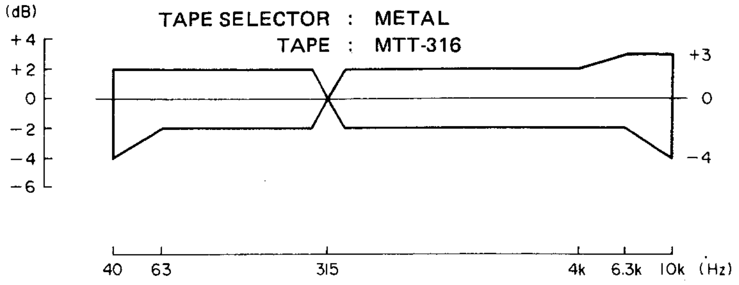


Fig. 5-3 Playback frequency response

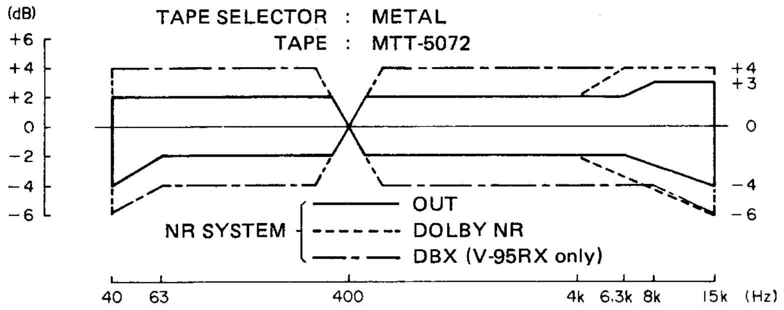


Fig. 5-4 Overall frequency response (METAL)

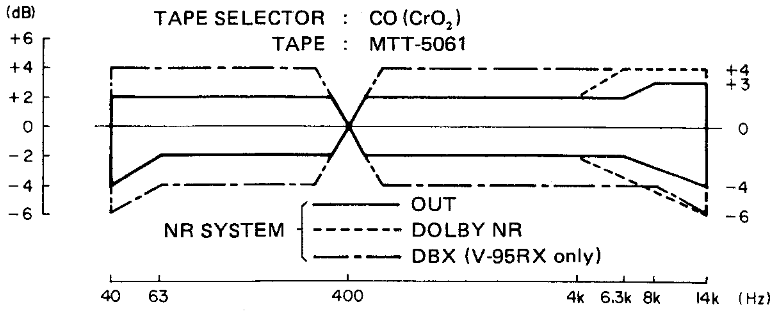


Fig. 5-5 Overall frequency response (Co (CrO_2))

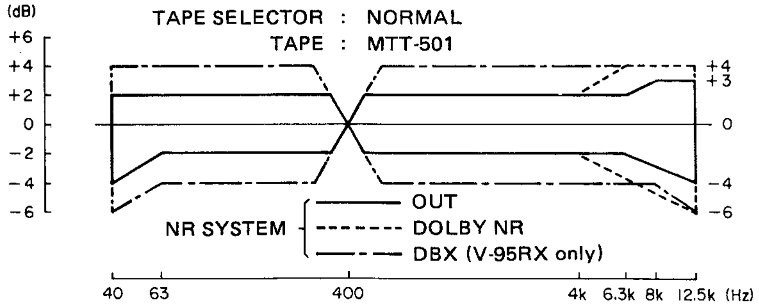


Fig. 5-6 Overall frequency response (NORMAL)

5-5 DBX PCB ADJUSTMENT (V-95RX ONLY)

Notes:

1. This section adjustment is not usually needed unless any adjustor(s) has been changed or any component(s) on the PCB has sustained damage, since the dbx PCB assembly has been precisely adjusted at the factory.
2. For this section adjustment, it is necessary to disconnect the wires from terminals 1, 3, 4, and 6 of connector P502 on the dbx PCB. Turn the deck OFF to prevent accidental damage when disconnecting or reconnecting.
3. Simply press the POWER switch to ON (all other switches and controls on the deck have no affect on this adjustment), then make this section adjustment.

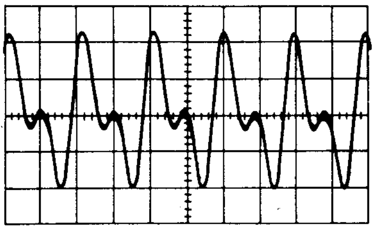


Fig. 5-7 R53/R63 setting (Incorrect)

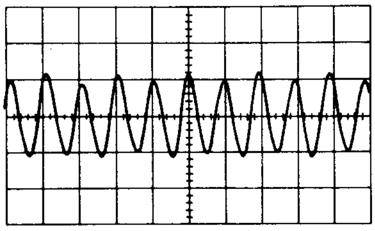


Fig. 5-8 R53/R63 setting (Correct)

5-5-1 ENCODING ADJUSTMENT

Adjustment should be performed in the record mode.

1. Preset all adjustors approximately to the center position.
2. Make the Fig. 5-9 connections, then feed 100 Hz, –8 dB (308 mV) to 1(6) terminal (INPUT).
3. Adjust R53/R63 (RMS SYM) to obtain a clear 200 Hz sine-wave on the oscilloscope. See Figs. 5-7 and 5-8.
4. Change the connections to Fig. 5-10, then feed a 1 kHz/–8 dB (308 mV) input signal to the INPUT terminal. Adjust R54/R64 (ENCODING LEVEL) so that AC voltmeter reads –8 dB (308 mV).
5. With the conditions in step 4, adjust R51/R61 (VCA SYM) for minimum distortion (0.2% or less).
6. Like Fig. 5-11, connect a DC voltmeter to TP51/TP61, then note the reading on the DC voltmeter with an input signal of 1 kHz/–8 dB (308 mV).
7. Cut off the input signal, then make the same measurement as in step 6 to adjust R52/R62 (EM ADJ) for the same level.
8. Repeat above steps 5 to 7 until the best results are obtained.
9. Check that when the input signal is 100 Hz/–8 dB (308 mV), then 10 kHz/–8 dB, the output signal from 3(4) terminal (OUTPUT) deviates by +0.5 dB ±0.5 dB, then –2.8 dB ±0.5 dB from –8 dB (reference), respectively ..... so that output, as a voltage value, should be 308 mV to 346 mV for 100 Hz, and 211 mV to 237 mV for 10 kHz.
10. Check that when 1 kHz/–68 dB (308 μV) is applied, the output is –38 dB ±0.5 dB (9.21 mV to 10.3 mV).
11. Check that when the input signal is 1 kHz, +12 dB (3.08 V), the output is +2 dB ±0.5 dB (581 mV to 652 mV) and the distortion factor is 0.3% or less.

5-5-2 DECODING ADJUSTMENT

Adjustment should be performed in the playback mode.

1. Preset all adjustors approximately to the center position.
2. Make the Fig. 5-12 connections, then feed a 1 kHz/–8 dB (308 mV) input signal to the INPUT terminal. Adjust R55/R65 (DECODING LEVEL) so that AC voltmeter reads –8 dB (308 mV).
3. Check that when the input signal is 100 Hz/–8 dB (308 mV), then 10 kHz/–8 dB, the output signal from 3(4) terminal (OUTPUT) deviates by –1 dB ±0.5 dB, then +5 dB ±0.5 dB from -8 dB (reference), respectively ..... so that output, as a voltage value, should be 652 mV to 731 mV for 100 Hz, and 1.30 V to 1.46V for 10 kHz.
4. Check that when 1 kHz/–38 dB (9.75 mV) is applied, the output is –68 dB ±1 dB (275 μV to 346 μV).
5. Check that when the input signal is 1 kHz, +2 dB (0.975 V), the output is +12 dB ±1 dB (2.75 V to 3.46 V) and the distortion factor is 0.3% or less.

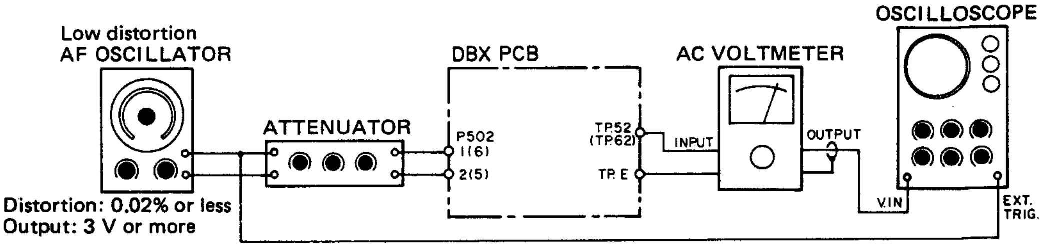

Low distortion
AF OSCILLATOR
ATTENUATOR
DBX PCB
P502
1(6)
2(5)
TP52
(TP62)
TP.E
AC VOLTMETER
INPUT
OUTPUT
OSCILLOSCOPE
V.IN
EXT.
TRIG.
Distortion: 0.02% or less
Output: 3 V or more

Fig. 5-9

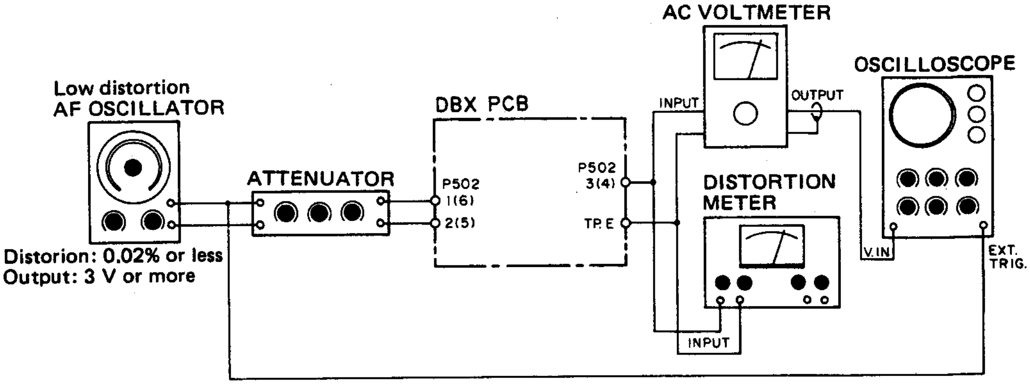

AC VOLTMETER
OSCILLOSCOPE
Low distortion
AF OSCILLATOR
DBX PCB
INPUT
OUTPUT
ATTENUATOR
P502
1(6)
2(5)
P502
3(4)
TP.E
DISTORTION
METER
V.IN
EXT.
TRIG.
INPUT
Distorion: 0.02% or less
Output: 3 V or more

Fig. 5-10

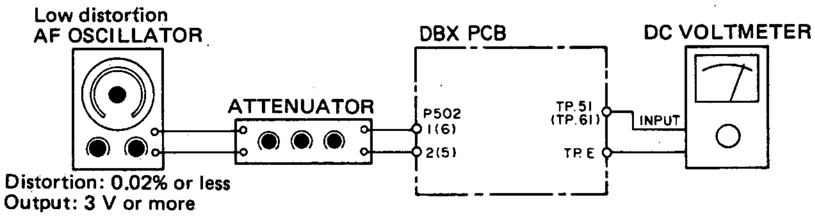

Low distortion
AF OSCILLATOR
DBX PCB
DC VOLTMETER
ATTENUATOR
P502
1(6)
2(5)
TP.51
(TP.61)
TP.E
INPUT
Distortion: 0.02% or less
Output: 3 V or more

Fig. 5-11

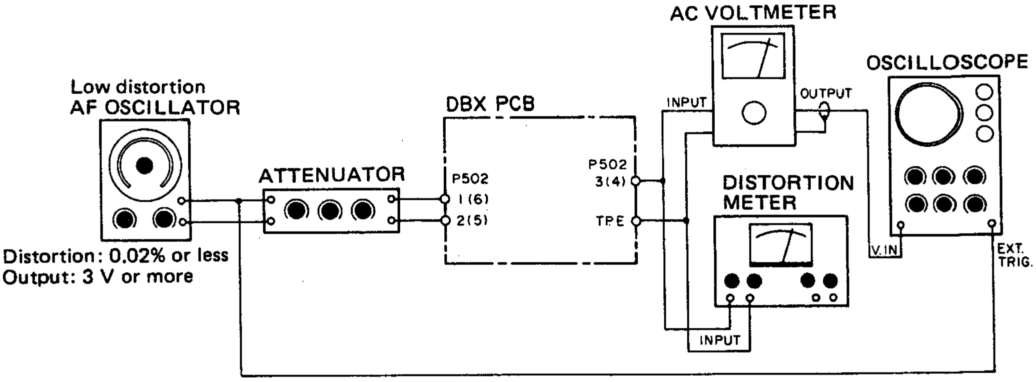

AC VOLTMETER
OSCILLOSCOPE
Low distortion
AF OSCILLATOR
DBX PCB
INPUT
OUTPUT
ATTENUATOR
P502
1(6)
2(5)
P502
3(4)
TP.E
DISTORTION
METER
V.IN
EXT.
TRIG.
INPUT
Distortion: 0.02% or less
Output: 3 V or more

Fig. 5-12

5-6 ADJUSTMENT AND TEST POINT LOCATIONS

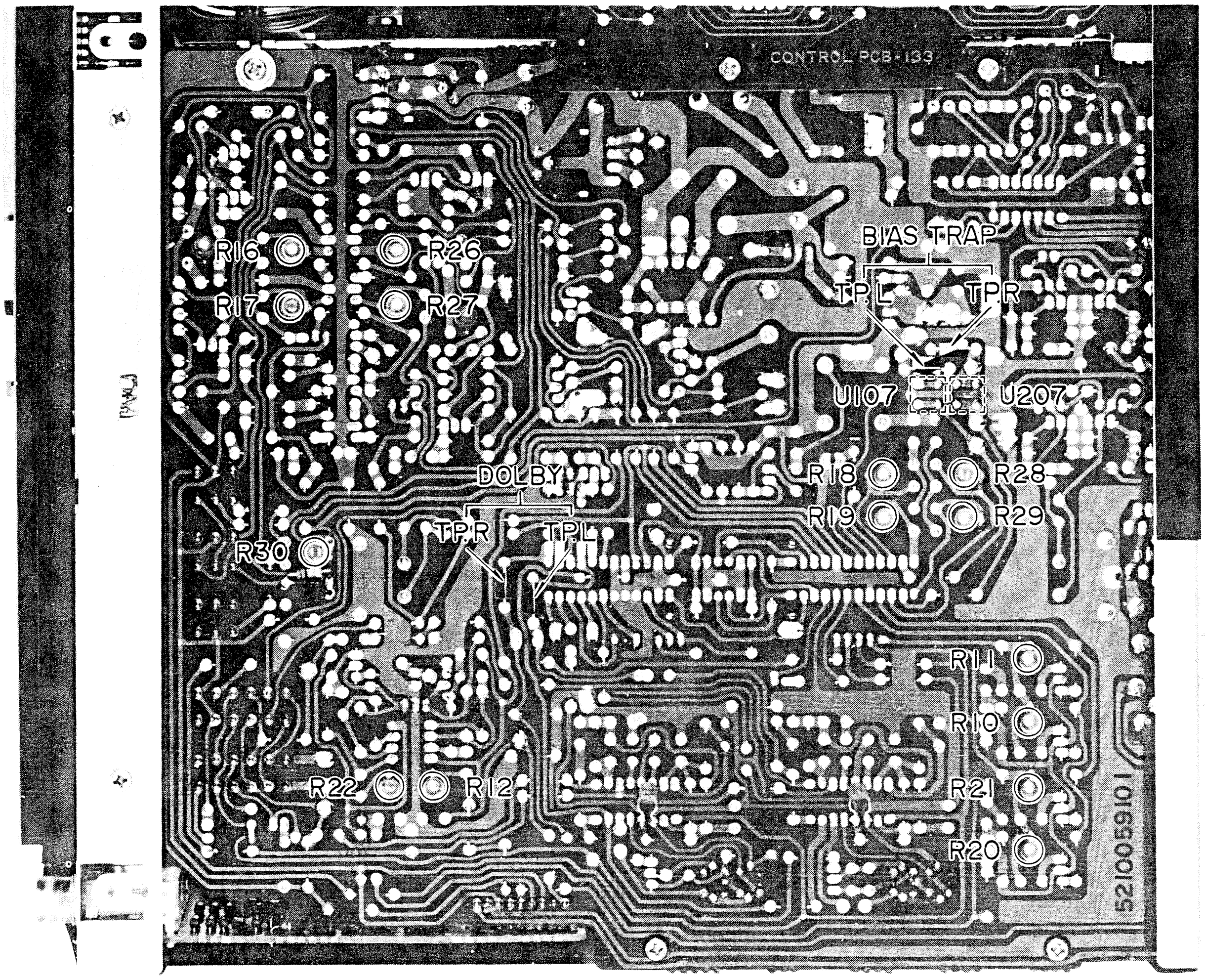

CONTROL PCB-133
R16
R26
R17
R27
BIAS TRAP
TP.L
TP.R
U107
U207
R18
R28
R19
R29
DOLBY
TP.R
TP.L
R30
R11
R10
R21
R20
R22
R12
52I005910I

Fig. 5-13

R10/R20	Playback level [FWD]
R11/R21	Playback level [REV]
R12/R22	Peak program level meter
R16/R26	Record level [FWD]
R17/R27	Record level [REV]
R18/R28	Record bias [FWD]
R19/R29	Record bias [REV]
R30	Record bias [NORMAL]
U107/U207	Bias trap

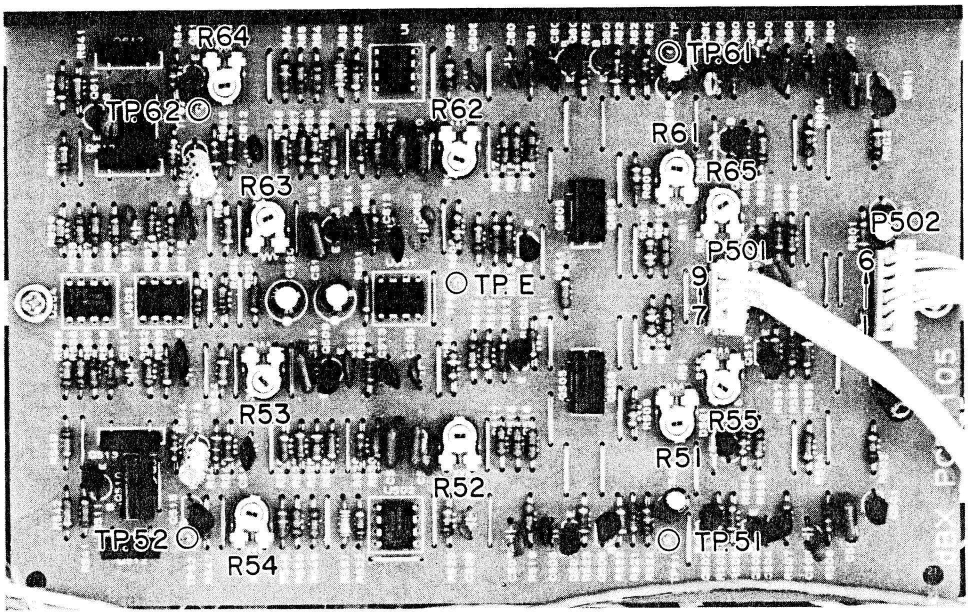
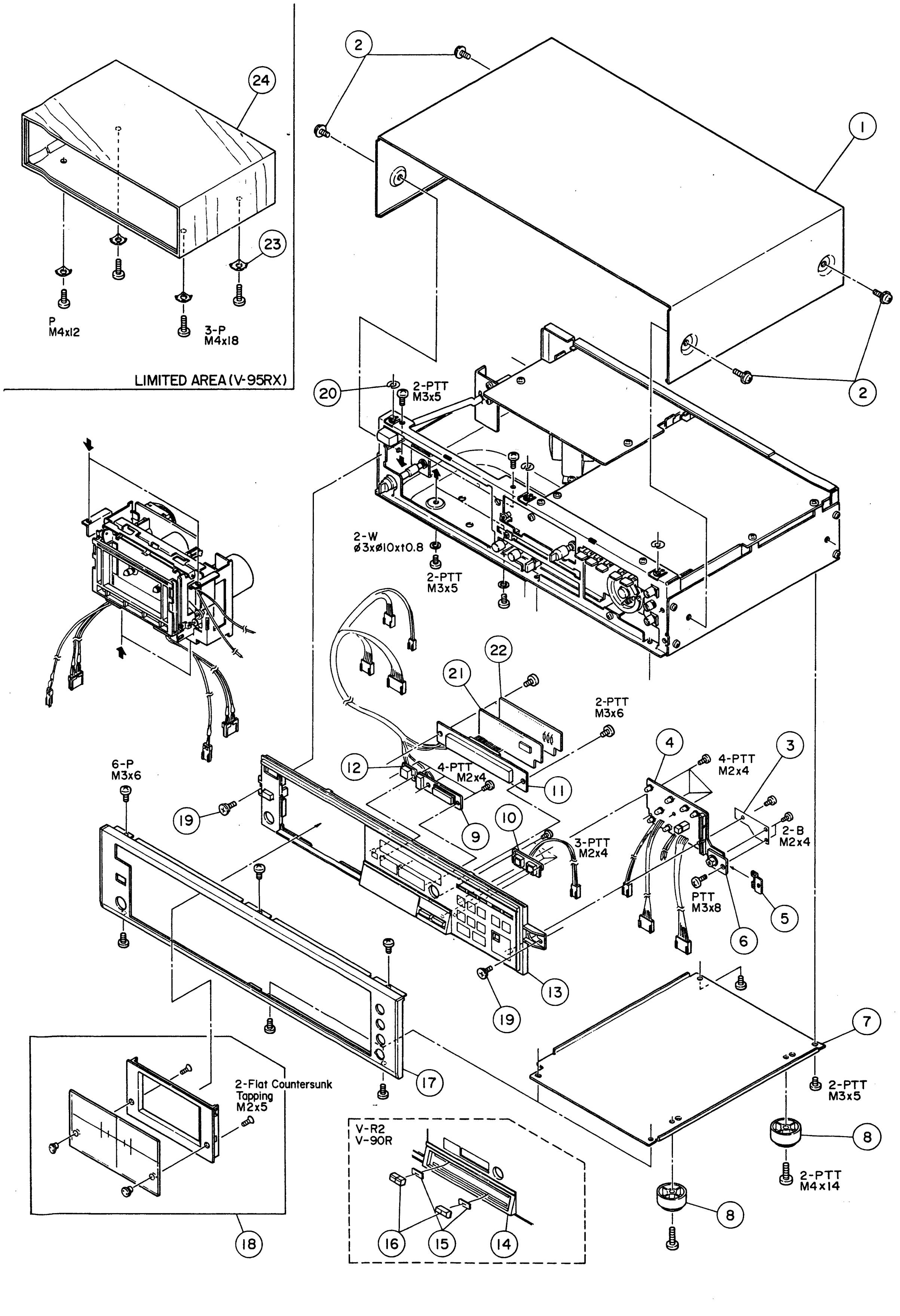

R64
TP.61
TP.62
R62
R61
R65
R63
P502
P501
9
6
TP. E
7
R53
R55
R51
R52
TP.52
TP.51
R54

Fig. 5-14

R51/R61	VCA SYM adjustment
R52/R62	EM adjustment
R53/R63	RMS SYM adjustment
R54/R64	Encoding level
R55/R65	Decoding level

6 EXPLODED VIEWS AND PARTS LIST

EXPLODED VIEW-1


24
23
P
M4x12
3-P
M4x18
LIMITED AREA (V-95RX)
2
1
2
20
2-PTT
M3x5
2-W
ø3xø10xt0.8
2-PTT
M3x5
22
21
2-PTT
M3x6
12
4-PTT
M2x4
11
9
10
3-PTT
M2x4
4
4-PTT
M2x4
3
2-B
M2x4
PTT
M3x8
5
6
6-P
M3x6
19
13
19
7
2-PTT
M3x5
8
2-PTT
M4x14
8
17
2-Flat Countersunk
Tapping
M2x5
18
V-R2
V-90R
16
15
14

Parts marked with *require longer delivery time.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1 - 1	*5800155300	Cover, Top	V-3RX
1 - 2	*5783084008	Screw, M4 x 8 (BLK Ni)	
1 - 3	*5800318402	Plate, Shield	Part of 1-4
1 - 4	*5200060600	PCB Assy, OPERATION SW [All except US, C]	V-95RX, V-R1
	*5200060610	PCB Assy, OPERATION SW [US, C]	V-95RX
	*5200060620	PCB Assy, OPERATION SW [All except US, C]	V-90R, V-R2
	*5200060630	PCB Assy, OPERATION SW	V-90R
1 - 5	*5800241600	Angle, Socket	
1 - 6	*5800305500	Plate, Socket	
1 - 7	*5800239801	Chassis, Bottom [All except L]	
	*5800244400	Chassis, Bottom [L]	
1 - 8	*5730002500	Foot, Q	
1 - 9	*5200060800	PCB Assy, 7 seg. LED	V-95RX/V-R1
	*5200060810	PCB Assy, 7 seg. LED	V-90R/V-R2
1 -10	*5200059900	PCB Assy, UP DOWN SW [All except US, C]	V-95RX/V-R1
	*5200059910	PCB Assy, UP DOWN SW [US, C]	V-95RX
1 -11	5296004100	Meter Assy, LED	
1 -12	*5200060900	PCB Assy, DBX LED	V-95RX/V-R1
1 -13	*5640027900	Key Unit Sub-Assy	V-95RX/V-R1
1 -14	*5640027910	Key Unit Sub-Assy	V-90R/V-R2
1 -15	*5800327100	Spacer, Slide VR	V-90R/V-R2
1 -16	5800243700	Knob, Slide VR	V-90R/V-R2
1 -17	*5640027800	Panel Assy, Front [J]	V-R1
	*5640027810	Panel Assy, Front [All except J]	V-95RX
	*5640027820	Panel Assy, Front [J]	V-R2
	*5640027830	Panel Assy, Front [All except J]	V-90R
1 -18	5640028000	Cover Assy, Cassette	V-95RX/V-R1
	5640028010	Cover Assy, Cassette	V-90R/V-R2
1 -19	*5581057000	Screw, Shoulder; B	
1 -20	*5786140400	Ring, Clip	
1 -21	*5200059700	PCB Assy, LEVEL METER; A [All except US, C]	
	*5200059710	PCB Assy, LEVEL METER; A [US, C]	
1 -22	*5200059800	PCB Assy, LEVEL METER; B [All except US, C]	
	*5200059810	PCB Assy, LEVEL METER; B [US, C]	
1 -23	*5555526000	Washer [L]	V-95RX
1 -24	*5800244200	Cabinet Assy [L]	V-95RX

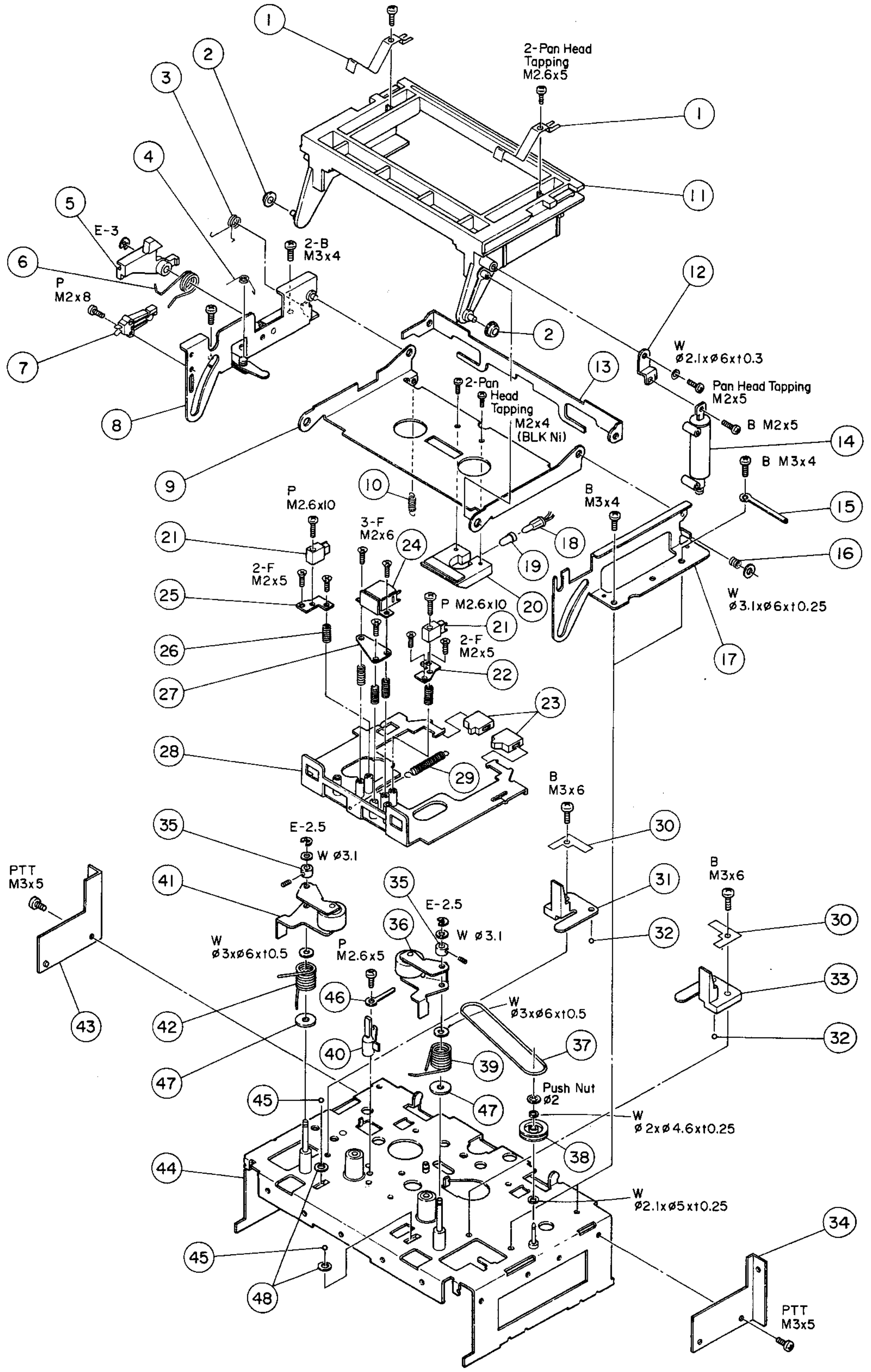
INCLUDED ACCESSORIES

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	5700023200	V-95RX Owner's Manual [US]	
	5700023300	V-95RX Owner's Manual [All except US, J]	
	5700023100	V-1RX Owner's Manual [J]	
	5700023500	V-90R Owner's Manual [US]	
	5700023600	V-90R Owner's Manual [All except US, J]	
	5700023400	V-R2 Owner's Manual [J]	
	5101345000	Information Supplement [US]	
	5101495000	Information Supplement [All except US]	
	5744018500	Remote Control Unit, RC-95 [L, J]	V-95RX/V-R1
	5128065000	Cord Assy, In-output	

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.
[A]: AUSTRALIA [J]: JAPAN [L]: LIMITED AREA

EXPLODED VIEW-2 (OLDER TYPE)

V-95RX: Ser. No. 2440 and before
V-90R: Ser. No. 3470 and before

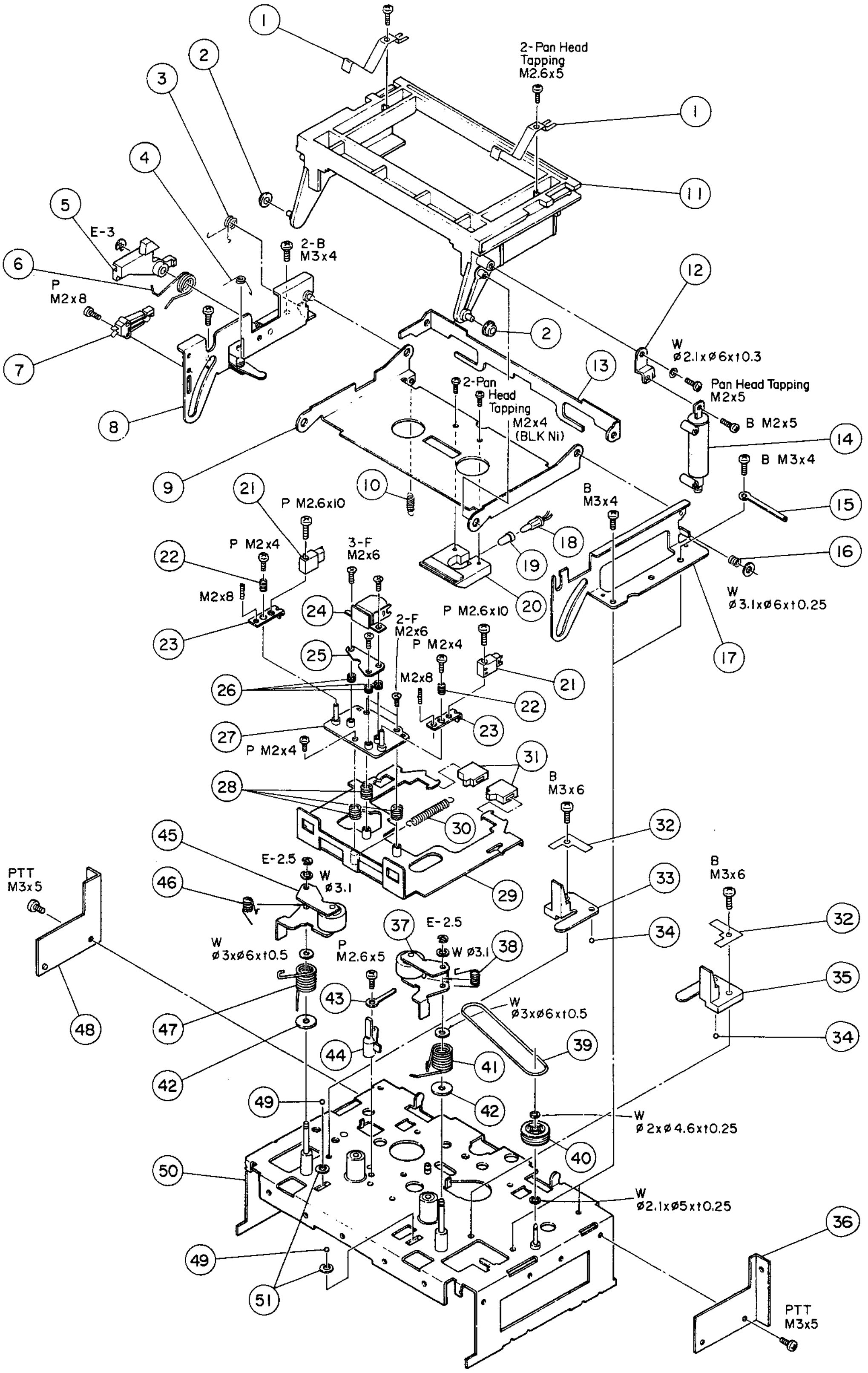

1
2
3
2-Pan Head Tapping M2.6x5
1
4
11
5
E-3
2-B M3x4
6
P M2x8
12
7
2
W ø2.1xø6xt0.3
Pan Head Tapping M2x5
13
2-Pan Head Tapping M2x4 (BLK Ni)
8
B M2x5
14
B M3x4
9
10
B M3x4
15
P M2.6x10
3-F M2x6
24
18
21
16
2-F M2x5
19
W ø3.1xø6xt0.25
25
20
P M2.6x10
21
26
2-F M2x5
17
22
27
23
28
29
B M3x6
35
30
E-2.5
W ø3.1
PTT M3x5
41
35
31
B M3x6
E-2.5
30
W ø3.1
W ø3xø6xt0.5
36
32
P M2.6x5
33
46
W ø3xø6xt0.5
43
42
37
40
32
39
47
47
45
Push Nut ø2
W ø2xø4.6xt0.25
38
44
W ø2.1xø5xt0.25
34
45
48
PTT M3x5

Parts marked with *require longer delivery time.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
2 - 1	*5760210500	Spring, Cassette Pressure; B	
2 - 2	*5760209800	Sleeve, Holder	
2 - 3	*5760211800	Spring, Lever	
2 - 4	*5760212000	Spring, Lock Lever	
2 - 5	*5760210000	Lever, Cassette Lock	
2 - 6	*5760212100	Spring, Eject Lever	
2 - 7	5760213600	Switch, Skeleton	
2 - 8	*5760209500	Guide Assy, Holder; L	
2 - 9	*5760210400	Plate, Cassette Holder	
2 -10	*5760211900	Spring, Holder Plate; B	
2 -11	*5760209400	Holder Assy, Cassette	
2 -12	*5760210300	Bracket, Damper	
2 -13	*5760210100	Lever, Cassette Pressure	
2 -14	*5760210200	Damper Assy	
2 -15	*5760210900	Clamper, Cord	
2 -16	*5760212200	Spring, Pressure Lever	
2 -17	*5760209600	Guide Assy, Holder; R	
2 -18	5760214000	Lamp	
2 -19	*5760210800	Cap, Lamp; G80	
2 -20	*5760210600	Plate, Illumination	
2 -21	5378901700	Head, Erase	
2 -22	*5760169800	Bracket, Erase Head; B	
2 -23	*5760168800	Shoe, Brake	
2 -24	5378901500	Head, REC/PLAY	
2 -25	*5760169900	Bracket, Erase Head	
2 -26	*5760211500	Spring, Head Alignment	
2 -27	*5760167600	Plate, Head	
2 -28	*5760169600	Plate Assy, Head Base	
2 -29	*5760211300	Spring, Head Base Plate	
2 -30	*5760167900	Spring, Base Plate Pressure	
2 -31	*5760167800	Guide, Cassette; B	
2 -32	*5760212900	Steel Ball, ϕ2.5	
2 -33	*5760167700	Guide, Cassette; A	
2 -34	*5800241500	Bracket, Mechanism Chassis; R	
2 -35	*5760209300	Column, Adjusting	
2 -36	5760166500	Arm B Assy, Pinch Roller; F	
2 -37	5760166300	Belt	
2 -38	5800307801	Pulley, Counter	
2 -39	*5760211000	Spring, Pinch Roller; F	
2 -40	*5760213900	Sensor Assy	
2 -41	5760166400	Arm Assy, Pinch Roller; R	
2 -42	*5760211100	Spring, Pinch Roller; R	
2 -43	*5800241400	Bracket, Mechanism Chassis; L	
2 -44	*5760169500	Chassis Assy, Mechanism	
2 -45	*5760212800	Steel Ball, ϕ2	
2 -46	*5760209700	Clamper, Cord	
2 -47	*5760212500	Washer, ϕ6.1 x ϕ10 x t0.3	
2 -48	*5760212600	Washer, ϕ2.4 x ϕ6 x t0.3	

EXPLODED VIEW-2 (NEWNER TYPE)

V-95RX: Ser. No. 2441 and after
V-90R: Ser. No. 3471 and after

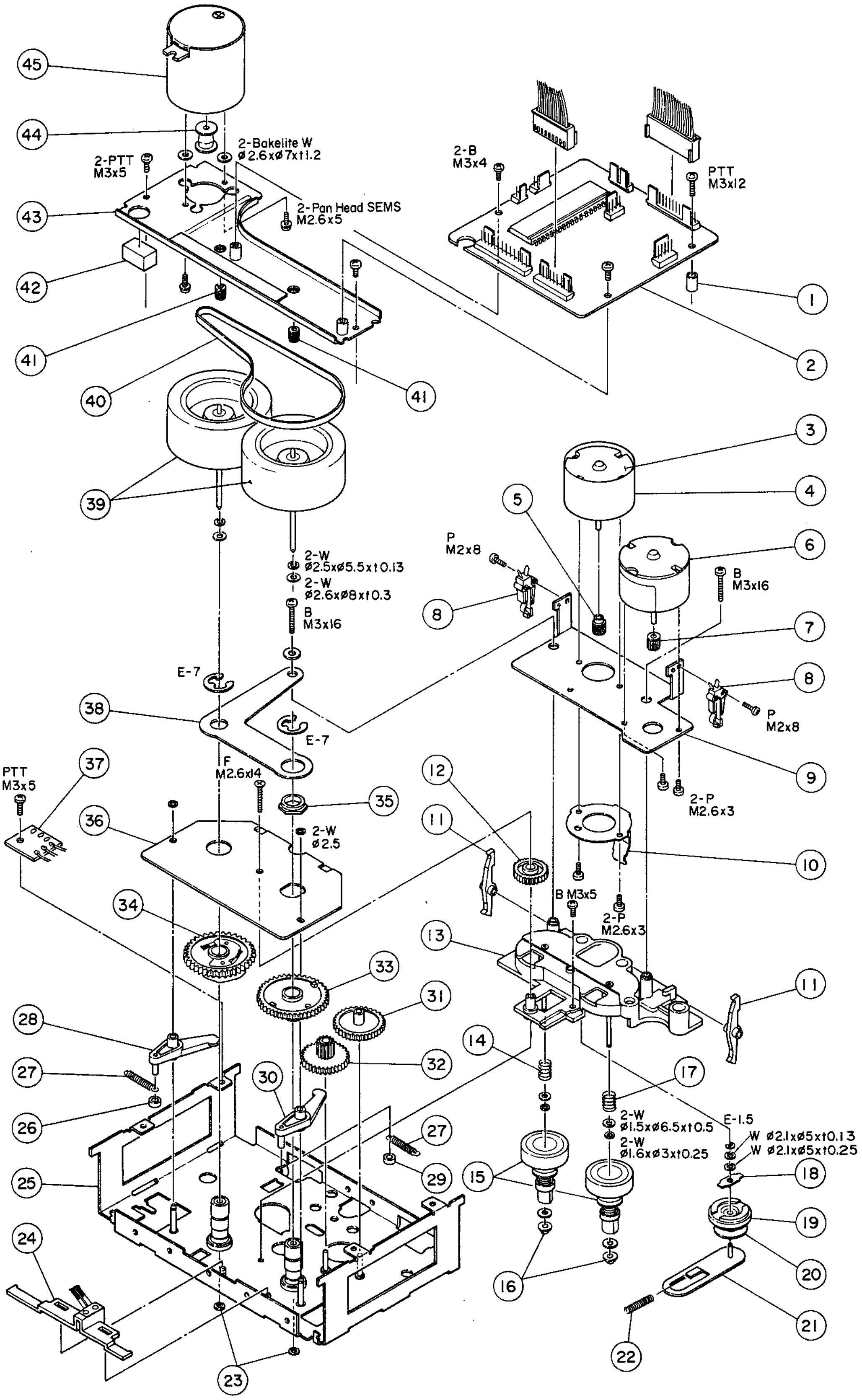

①
2-Pan Head
Tapping
M2.6x5
①
②
③
④
⑪
⑤
E-3
2-B
M3x4
⑥
P
M2x8
⑦
⑧
⑫
W
ø2.1xø6xt0.3
Pan Head Tapping
M2x5
B M2x5
⑬
②
2-Pan
Head
Tapping
M2x4
(BLK Ni)
⑭
B M3x4
⑨
⑩
㉑
P M2.6x10
B
M3x4
⑮
⑱
⑲
⑳
⑯
W
ø3.1xø6xt0.25
P M2x4
㉒
3-F
M2x6
M2x8
㉓
㉔
2-F
M2x6
P M2.6x10
P M2x4
㉕
⑰
㉑
M2x8
㉖
㉒
㉗
㉓
P M2x4
㉛
㉘
B
M3x6
㉚
㉜
㊺
E-2.5
W
ø3.1
㉝
B
M3x6
PTT
M3x5
㊻
㉙
㉞
㉜
㊲
E-2.5
W ø3.1
㊳
W
ø3xø6xt0.5
P
M2.6x5
㉟
㊸
W
ø3xø6xt0.5
㊼
㊽
㊹
㊴
㉞
㊶
㊷
㊷
㊾
W
ø2xø4.6xt0.25
㊿
㊵
W
ø2.1xø5xt0.25
㊾
㊱
(51)
PTT
M3x5

Parts marked with *require longer delivery time.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
2 - 1	*5760210500	Spring, Cassette Pressure; B	
2 - 2	*5760209800	Sleeve, Holder	
2 - 3	*5760211800	Spring, Lever	
2 - 4	*5760212000	Spring, Lock Lever	
2 - 5	*5760210000	Lever, Cassette Lock	
2 - 6	*5760212100	Spring, Eject Lever	
2 - 7	5760213600	Switch, Skeleton	
2 - 8	*5760209500	Guide Assy, Holder; L	
2 - 9	*5760210400	Plate, Cassette Holder	
2 -10	*5760211900	Spring, Holder Plate; B	
2 -11	*5760209400	Holder Assy, Cassette	
2 -12	*5760210300	Bracket, Damper	
2 -13	*5760210100	Lever, Cassette Pressure	
2 -14	*5760210200	Damper Assy	
2 -15	*5760210900	Clamper, Cord	
2 -16	*5760212200	Spring, Pressure Lever	
2 -17	*5760209600	Guide Assy, Holder; R	
2 -18	5760214000	Lamp	
2 -19	*5760210800	Cap, Lamp; G80	
2 -20	*5760210600	Plate, Illumination	
2 -21	5378901700	Head, Erase	
2 -22	*5800356800	Spring, Erase Head Bracket	
2 -23	*5800356700	Bracket, Erase Head	
2 -24	5378901500	Head, REC/PLAY	
2 -25	*5760167600	Plate, Head	
2 -26	*5800356600	Spring, REC/PLAY Head	
2 -27	*5800356400	Plate Assy, Head Mounting	
2 -28	*5800356500	Spring, Head Mounting Plate	
2 -29	*5760169601	Plate Assy, Head Base; A	
2 -30	*5760211301	Spring, Head Base	
2 -31	*5760168800	Shoe, Brake	
2 -32	*5760167900	Spring, Base Plate Pressure	
2 -33	*5760167800	Guide, Cassette; B	
2 -34	*5760212900	Steel Ball, ϕ2.5	
2 -35	*5760167700	Guide, Cassette; A	
2 -36	*5800241500	Bracket, Mechanism Chassis; R	
2 -37	5760166501	Arm B Assy, Pinch Roller; F	
2 -38	*5800357800	Spring, Pinch Roller F; B	
2 -39	5760166300	Belt	
2 -40	5800307801	Pulley, Counter	
2 -41	*5800357600	Spring, Pinch Roller F; A	
2 -42	*5760212500	Washer, ϕ6.1 x ϕ10 x t0.3	
2 -43	*5760209700	Clamper, Cord	
2 -44	*5760213900	Sensor Assy	
2 -45	5760166401	Arm B Assy, Pinch Roller; R	
2 -46	*5800357900	Spring, Pinch Roller R; B	
2 -47	*5800357700	Spring, Pinch Roller R; A	
2 -48	*5800241400	Bracket, Mechanism Chassis; L	
2 -49	*5760212800	Steel Ball, ϕ2	
2 -50	*5760169501	Chassis Assy, Mechanism	
2 -51	*5760212600	Washer, ϕ2.4 x ϕ6 x t0.3	

EXPLODED VIEW-3 (OLDER TYPE)

V-95RX: Ser. No. 2440 and before
V-90R: Ser. No. 3470 and before

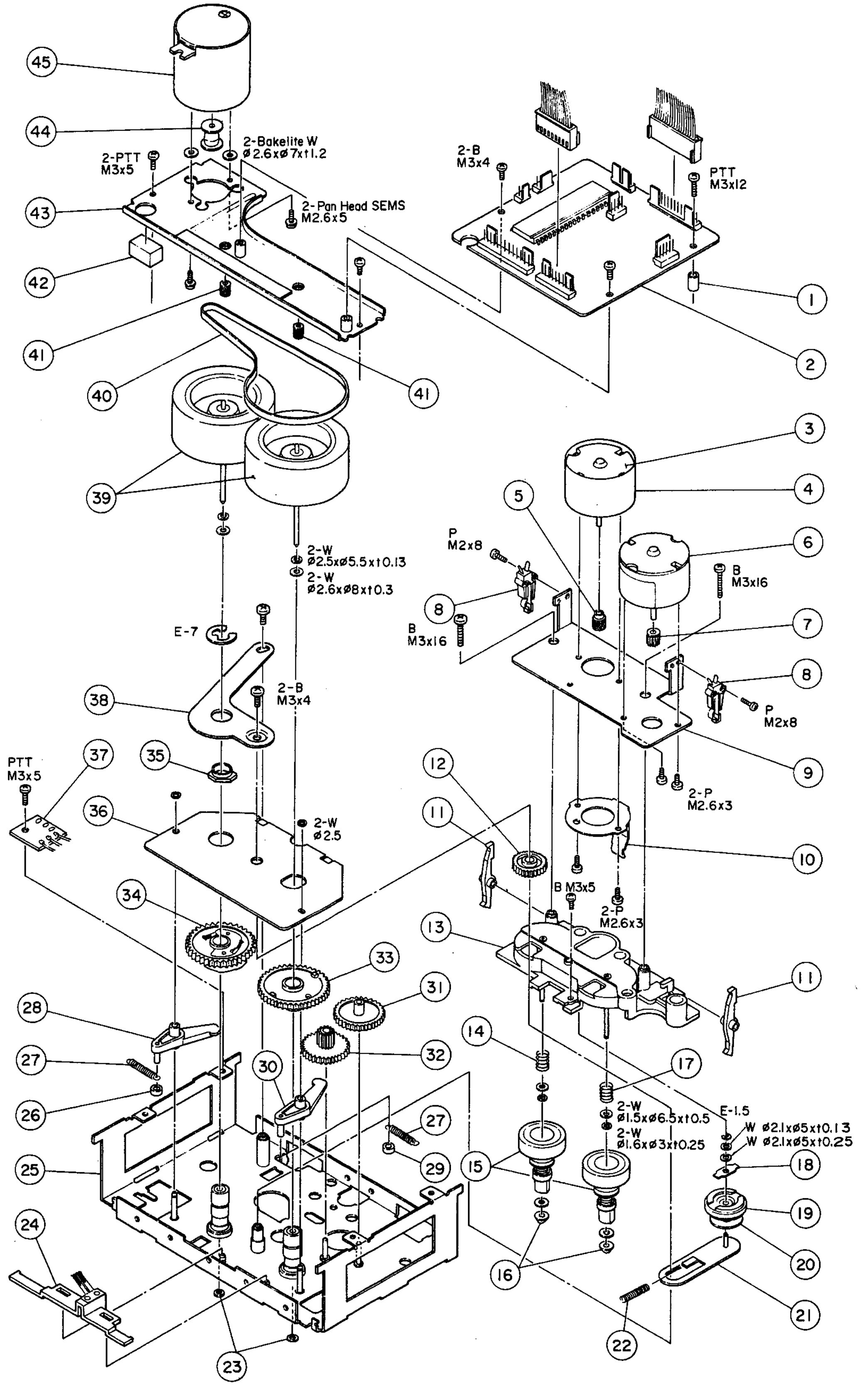

45
44
2-PTT M3x5
2-Bakelite W ø2.6xø7xt1.2
43
2-Pan Head SEMS M2.6x5
42
41
40
41
2-B M3x4
PTT M3x12
1
2
3
39
4
5
6
P M2x8
8
B M3x16
7
2-W ø2.5xø5.5xt0.13
2-W ø2.6xø8xt0.3
B M3x16
E-7
38
E-7
8
P M2x8
9
37
PTT M3x5
F M2.6x14
35
2-P M2.6x3
12
36
2-W ø2.5
11
10
34
B M3x5
2-P M2.6x3
13
33
31
11
28
14
32
17
27
30
27
26
2-W ø1.5xø6.5xt0.5
2-W ø1.6xø3xt0.25
E-1.5
W ø2.1xø5xt0.13
W ø2.1xø5xt0.25
25
29
15
18
19
24
16
20
21
22
23

Parts marked with *require longer delivery time.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
3 - 1	*5760169400	Stud, PCB; B	
3 - 2	*5760215800	PCB Assy, CONTROL	
3 - 3	5760214700	Motor, Reel	
3 - 4	*5800235900	Plate, Shield	
3 - 5	5760214800	Pulley, Reel Motor; B	
3 - 6	5760214900	Motor, Mechanism	
3 - 7	5760215000	Pinion	
3 - 8	5760213600	Switch, Skeleton	
3 - 9	*5760169100	Bracket, Motor	
3 -10	*5760209900	Spring, Cassette Pressure	
3 -11	*5760168700	Lever, REC	
3 -12	5760168600	Gear, Relay	
3 -13	*5760167300	Sub-Chassis Assy	
3 -14	*5760211600	Spring, Back Tension	
3 -15	5760166600	Table Assy, Reel; T	
3 -16	5760168900	Cap, Reel Table Shaft	
3 -17	*5760211700	Spring, Back Tension; C	
3 -18	*5760214300	Spring, Idler	
3 -19	5760214400	Idler Assy, FR	
3 -20	*5760214200	Washer, Felt	
3 -21	*5760214100	Plate Assy, Idler	
3 -22	*5760211400	Spring, Plate Assy; B	
3 -23	*5760212600	Washer, Nylon	
3 -24	*5760167400	Lever Assy, Direction	
3 -25	*5760169500	Chassis Assy, Mechanism	
3 -26	*5800358600	Collar, Pinch Arm; F	
3 -27	*5760211200	Spring, Pinch Roller Actuating	
3 -28	*5760168000	Lever, Pinch Roller Actuating; F	
3 -29	*5800358700	Collar, Pinch Arm; R	
3 -30	*5760168100	Lever, Pinch Roller Actuating; R	
3 -31	5760168200	Gear, 2nd	
3 -32	5760168300	Gear, 3rd	
3 -33	5760168400	Cam, R	
3 -34	5760167500	Cam Assy, F	
3 -35	*5760169300	Column, Eccentric	
3 -36	*5760216100	PCB Assy, CAM	
3 -37	*5760216000	PCB Assy, JOINT	
3 -38	*5760168500	Plate, Adjusting	
3 -39	5760167100	Flywheel Assy	
3 -40	5760166700	Belt, Capstan Drive	
3 -41	*5760169200	Screw, Thrust	
3 -42	*5760169000	Cushion	
3 -43	*5760169700	Bracket Assy, Main Motor	
3 -44	5760215200	Pulley, Main Motor	
3 -45	5760215100	Motor, Main	

EXPLODED VIEW-3 (NEWER TYPE)

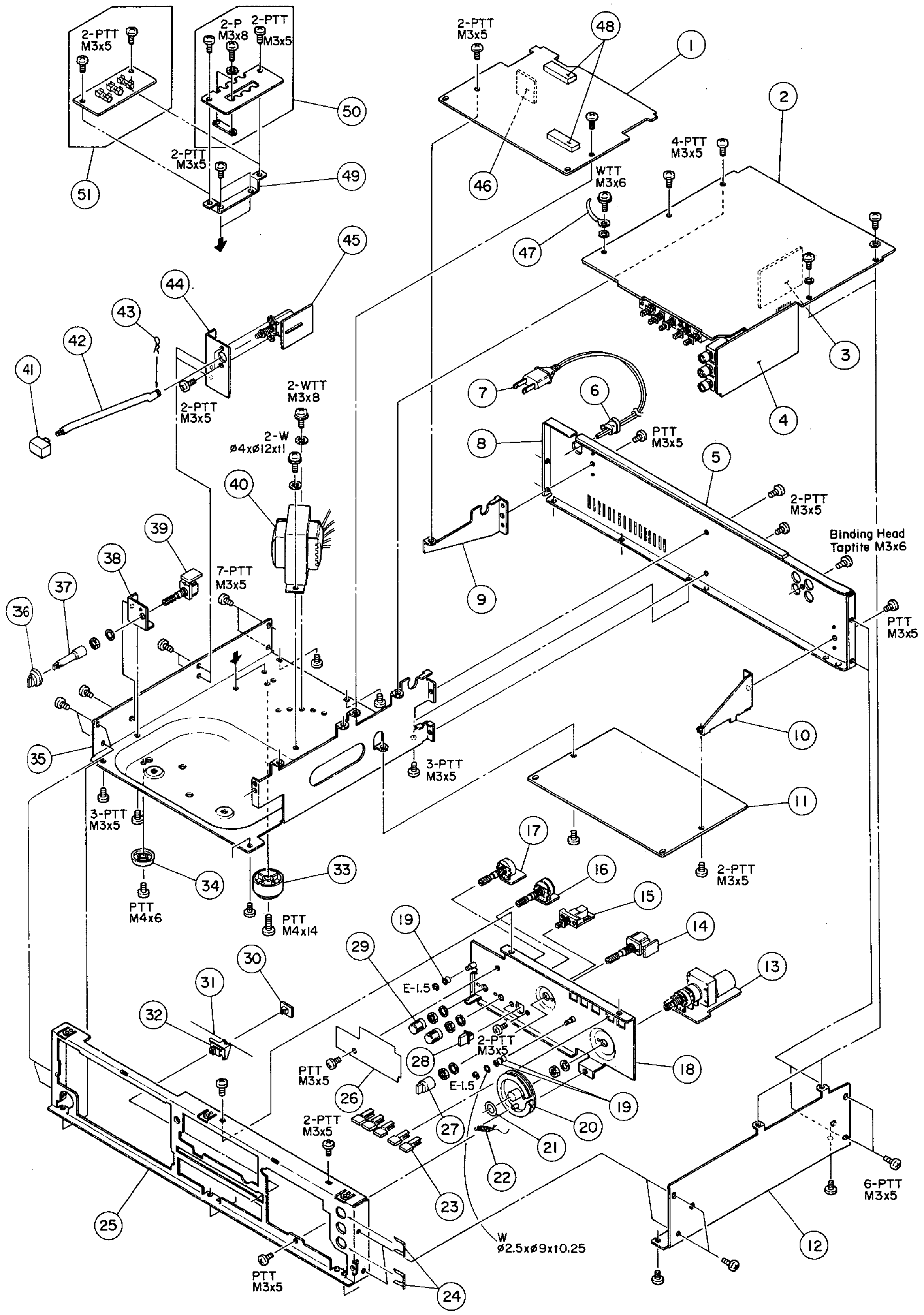
V-95RX: Ser. No. 2441 and after
V-90R: Ser. No. 3471 and after


45
44
2-Bakelite W
ø2.6xø7xt1.2
2-PTT
M3x5
43
2-Pan Head SEMS
M2.6x5
42
41
40
41
39
2-B
M3x4
PTT
M3x12
1
2
3
4
5
6
P
M2x8
B
M3x16
8
B
M3x16
7
8
P
M2x8
9
2-P
M2.6x3
10
2-W
ø2.5xø5.5xt0.13
2-W
ø2.6xø8xt0.3
E-7
38
2-B
M3x4
PTT
M3x5
37
35
36
2-W
ø2.5
12
11
B M3x5
2-P
M2.6x3
13
11
34
33
31
28
32
27
30
27
26
29
25
14
17
2-W
ø1.5xø6.5xt0.5
2-W
ø1.6xø3xt0.25
E-1.5
W ø2.1xø5xt0.13
W ø2.1xø5xt0.25
15
18
19
20
16
24
21
22
23

Parts marked with *require longer delivery time.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
3 - 1	*5760169400	Stud, PCB; B	
3 - 2	*5760215800	PCB Assy, CONTROL	
3 - 3	5760214700	Motor, Reel	
3 - 4	*5800235900	Plate, Shield	
3 - 5	5760214800	Pulley, Reel Motor; B	
3 - 6	5760214900	Motor, Mechanism	
3 - 7	5760215000	Pinion	
3 - 8	5760213600	Switch, Skeleton	
3 - 9	*5760169100	Bracket, Motor	
3 - 10	*5760209900	Spring, Cassette Pressure	
3 - 11	*5760168700	Lever, REC	
3 - 12	5760168600	Gear, Relay	
3 - 13	*5760167300	Sub-Chassis Assy	
3 - 14	*5760211600	Spring, Back Tension	
3 - 15	5760166600	Table Assy, Reel; T	
3 - 16	5760168900	Cap, Reel Table Shaft	
3 - 17	*5760211700	Spring, Back Tension; C	
3 - 18	*5760214300	Spring, Idler	
3 - 19	5760214400	Idler Assy, FR	
3 - 20	*5760214200	Washer, Felt	
3 - 21	*5760214100	Plate Assy, Idler	
3 - 22	*5760211400	Spring, Plate Assy; B	
3 - 23	*5760212600	Washer, Nylon	
3 - 24	*5760167400	Lever Assy, Direction	
3 - 25	*5760169500	Chassis Assy, Mechanism	
3 - 26	*5800358600	Collar, Pinch Arm; F	
3 - 27	*5760211200	Spring, Pinch Roller Actuating	
3 - 28	*5760168000	Lever, Pinch Roller Actuating; F	
3 - 29	*5800358700	Collar, Pinch Arm; R	
3 - 30	*5760168100	Lever, Pinch Roller Actuating; R	
3 - 31	5760168200	Gear, 2nd	
3 - 32	5760168300	Gear, 3rd	
3 - 33	5760168400	Cam, R	
3 - 34	5760167500	Cam Assy, F	
3 - 35	*5760169301	Column, Eccentric	
3 - 36	*5760216100	PCB Assy, CAM	
3 - 37	*5760216000	PCB Assy, JOINT	
3 - 38	*5760168501	Plate, Adjusting	
3 - 39	5760167100	Flywheel Assy	
3 - 40	5760166700	Belt, Capstan Drive	
3 - 41	*5760169200	Screw, Thrust	
3 - 42	*5760169000	Cushion	
3 - 43	*5760169701	Bracket Assy, Main Motor	
3 - 44	5760215200	Pulley, Main Motor	
3 - 45	5760215100	Motor, Main	

EXPLODED VIEW-4 (V-95RX/V-R1)

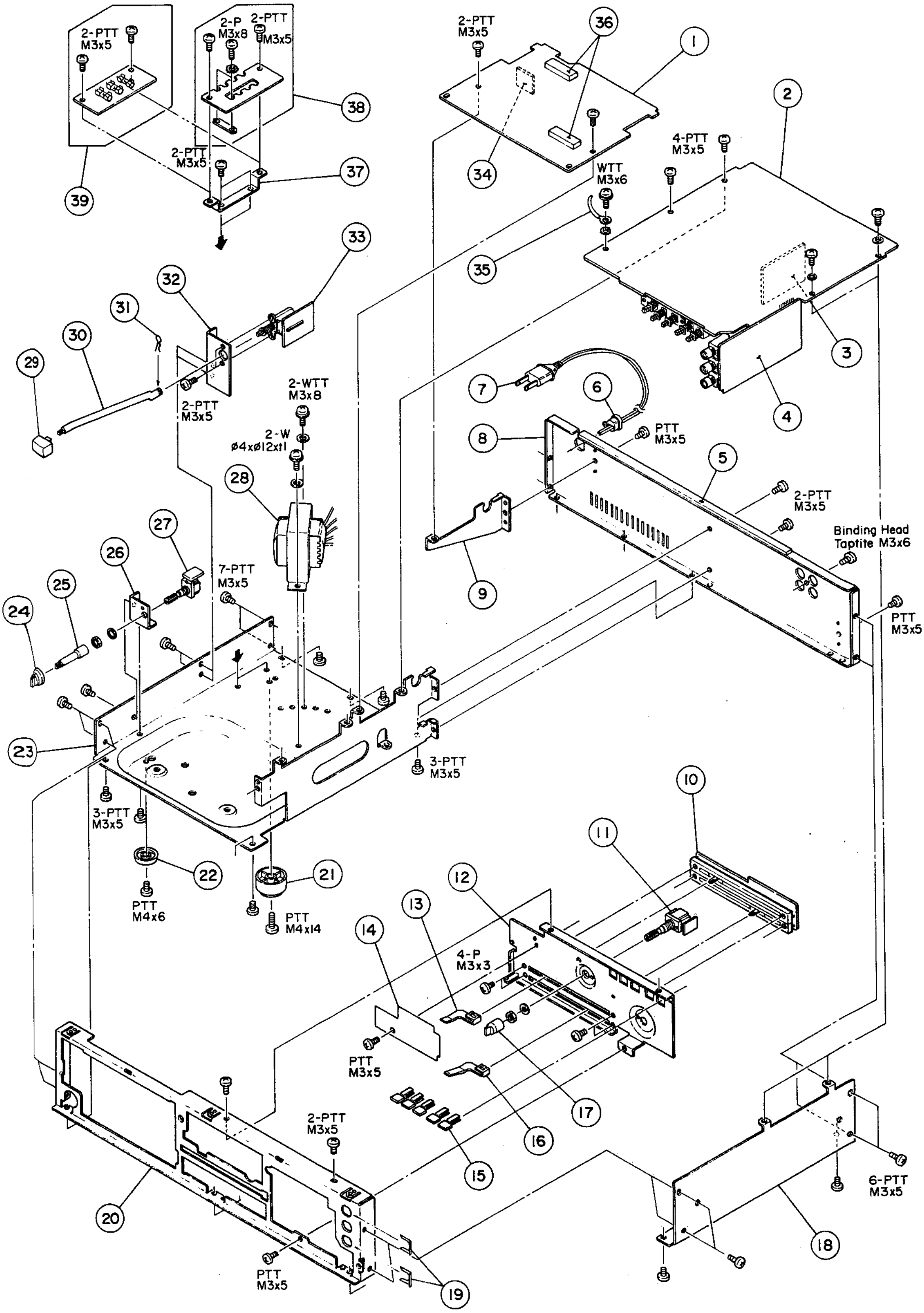

2-PTT
M3x5
2-P
M3x8
2-PTT
M3x5
51
50
2-PTT
M3x5
49
2-PTT
M3x5
48
1
46
2
4-PTT
M3x5
WTT
M3x6
47
3
4
45
44
43
42
41
2-PTT
M3x5
7
6
PTT
M3x5
8
5
2-WTT
M3x8
2-W
ø4xø12xt1
40
2-PTT
M3x5
Binding Head
Taptite M3x6
9
39
38
7-PTT
M3x5
37
36
PTT
M3x5
10
35
3-PTT
M3x5
11
3-PTT
M3x5
17
2-PTT
M3x5
34
33
16
PTT
M4x6
PTT
M4x14
15
19
14
29
E-1.5
30
13
31
32
2-PTT
M3x5
28
18
PTT
M3x5
E-1.5
19
26
20
27
21
2-PTT
M3x5
22
23
6-PTT
M3x5
25
W
ø2.5xø9xt0.25
12
PTT
M3x5
24

Parts marked with *require longer delivery time.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
4 - 1	*5200059500	PCB Assy, CONTROL [All except US, C]	
	*5200059510	PCB Assy, CONTROL [US, C]	
4 - 2	*5200059103	PCB Assy, REC/PLAY AMPL [All except US, C]	
	*5200059113	PCB Assy, REC/PLAY AMPL [US, C]	
4 - 3	*5200064200	PCB Assy, PLAYBACK AMPL [All except US, C]	
	*5200064210	PCB Assy, PLAYBACK AMPL [US, C]	
4 - 4	*5200059601	PCB Assy, MIC AMPL [All except US, C]	
	*5200059611	PCB Assy, MIC AMPL [US, C]	
4 - 5	*5555887001	Cushion, Top Cover	
4 - 6	*5534660000	Strain Relief, Cord; 4N-4 [All except UK]	
	*5534661000	Strain Relief, Cord; 4K-1 [UK]	
4 - 7	⚠*5128034000	Cord, AC Power [J, GE, L]	
	⚠*5128075000	Cord, AC Power [US, C]	
	⚠*5128047000	Cord, AC Power [UK]	
	⚠*5350008200	Cord, AC Power [E]	
	⚠*5350008300	Cord, AC Power [A]	
4 - 8	*5800240100	Panel, Rear	
4 - 9	*5800245301	Bracket, PCB; LG	
4 -10	*5800153901	Bracket, DBX PCB; B	
4 -11	*5200046100	PCB Assy, DBX	
4 -12	*5800240001	Chassis, R	
4 -13	*5200059200	PCB Assy, MOTOR VR [All except US, C]	
	*5200059210	PCB Assy, MOTOR VR [US, C]	
4 -14	*5200060000	PCB Assy, REVERSE MODE SW [All except US, C]	
	*5200060010	PCB Assy, REVERSE MODE SW [US, C]	
4 -15	*5200060200	PCB Assy, SPEED SW [All except US, C]	
	*5200060210	PCB Assy, SPEED SW [US, C]	
4 -16	*5200060400	PCB Assy, OUTPUT VR [All except US, C]	
	*5200060410	PCB Assy, OUTPUT VR [US, C]	
4 -17	*5200060301	PCB Assy, BALANCE VR [All except US, C]	
	*5200060311	PCB Assy, BALANCE VR [US, C]	
4 -18	*5800239500	Chassis, VR; (1)	
4 -19	*5800256500	Pulley	
4 -20	*5800243900	Pulley, VR	
4 -21	*5534681000	Ring, O	
4 -22	*5524279000	Spring	
4 -23	5800243001	Button, Switch	
4 -24	*5800178500	Clip, Jack	
4 -25	*5800239402	Chassis, Front	
4 -26	*5800273700	Plate, Insulating	
4 -27	5800160900	Knob, Auto Reverse	
4 -28	*5800243400	Button, Fade Speed	
4 -29	5800242900	Knob, VR	
4 -30	*5200061000	PCB Assy, VOLUME IND.	
4 -31	*5788202100	String	
4 -32	*5800241700	Holder, LED	
4 -33	*5730002500	Foot, Q	
4 -34	*5730002400	Foot, D	
4 -35	*5800239703	Chassis, L [All except L]	
	*5800244503	Chassis Assy, L [L]	
4 -36	5800044300	Knob, Timer	
4 -37	*5800154700	Rod, Joint	
4 -38	*5800242000	Bracket, Rotary Switch	
4 -39	*5200060100	PCB Assy, TIMER SW [All except US, C]	
	*5200060110	PCB Assy, TIMER SW [US, C]	
4 -40	⚠*5320012100	Transformer, Power [J]	
	⚠*5320012200	Transformer, Power [US]	
	⚠*5320012300	Transformer, Power [GE, L]	
	⚠*5320012400	Transformer, Power [E, UK, A]	
	⚠*5320012500	Transformer, Power [C]	
4 -41	5800242200	Button, Power	
4 -42	*5534723000	Rod, Joint; A	
4 -43	*5786360500	Pin, Snap	
4 -44	*5800242100	Bracket, Power Switch	
4 -45	*5200060500	PCB Assy, POWER SW [J]	
	*5200060510	PCB Assy, POWER SW [US]	
	*5200060520	PCB Assy, POWER SW [C]	
	*5200060530	PCB Assy, POWER SW [GE, L]	
	*5200060540	PCB Assy, POWER SW [E, UK, A]	
4 -46	*5200078800	PCB Assy, SENSOR	
4 -47	*5581038000	Clamper, Cord; A	
4 -48	*5800349800	Cushion, A	
4 -49	*5800213600	Bracket, SELECTOR PCB [GE, L, E, UK]	
4 -50	*5200034900	PCB Assy, VOLTAGE SELECTOR [GE, L]	
4 -51	*5200061201	PCB Assy, FUSE [E, UK]	

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.
[A]: AUSTRALIA [J]: JAPAN [L]: LIMITED AREA

EXPLODED VIEW-5 (V-90R/V-R2)


2-PTT M3x5
2-P M3x8
2-PTT M3x5
2-PTT M3x5
36
1
38
2
2-PTT M3x5
4-PTT M3x5
37
34
WTT M3x6
39
35
33
32
31
30
29
3
2-PTT M3x5
7
6
2-WTT M3x8
4
8
PTT M3x5
2-W ø4xø12xt1
5
28
2-PTT M3x5
Binding Head Taptite M3x6
27
9
26
7-PTT M3x5
25
24
PTT M3x5
23
3-PTT M3x5
10
3-PTT M3x5
11
22
21
12
PTT M4x6
PTT M4x14
13
14
4-P M3x3
PTT M3x5
17
16
2-PTT M3x5
15
6-PTT M3x5
20
18
PTT M3x5
19

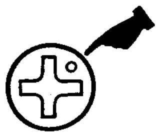
Parts marked with *require longer delivery time.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
5 - 1	*5200059520	PCB Assy, CONTROL [All except US, C]	
	*5200059530	PCB Assy, CONTROL [US, C]	
5 - 2	*5200059123	PCB Assy, REC/PLAY AMPL [All except US, C]	
	*5200059133	PCB Assy, REC/PLAY AMPL [US, C]	
5 - 3	*5200064200	PCB Assy, PLAYBACK AMPL [All except US, C]	
	*5200064210	PCB Assy, PLAYBACK AMPL [US, C]	
5 - 4	*5200059600	PCB Assy, MIC AMPL [All except US, C]	
	*5200059160	PCB Assy, MIC AMPL [US, C]	
5 - 5	*5555887001	Cushion, Top Cover	
5 - 6	*5534660000	Strain Relief, Cord; 4N-4 [All except UK]	
	*5534661000	Strain Relief, Cord; 4K-1 [UK]	
5 - 7	⚠*5128034000	Cord, AC Power [J, GE]	
	⚠*5128075000	Cord, AC Power [US, C]	
	⚠*5128047000	Cord, AC Power [UK]	
	⚠*5350008200	Cord, AC Power [E]	
	⚠*5350008300	Cord, AC Power [A]	
5 - 8	*5800240100	Panel, Rear	
5 - 9	*5800245301	Bracket, PCB; LG	
5 - 10	*5200059300	PCB Assy, SLIDE VR [All except US, C]	
	*5200059310	PCB Assy, SLIDE VR [US, C]	
5 - 11	*5200060000	PCB Assy, REVERSE MODE SW [All except US, C]	
	*5200060010	PCB Assy, REVERSE MODE SW [US, C]	
5 - 12	*5800239601	Chassis, VR; 2	
5 - 13	*5800242600	Lever, Slide VR; 1	
5 - 14	*5800273700	Plate, Insulating	
5 - 15	5800243001	Button, Switch	
5 - 16	*5800242700	Lever, Slide VR; 2	
5 - 17	5800160900	Knob, Auto Reverse	
5 - 18	*5800240001	Chassis, R	
5 - 19	*5800178500	Clip, Jack	
5 - 20	*5800239402	Chassis, Front	
5 - 21	*5730002500	Foot, Q	
5 - 22	*5730002400	Foot, D	
5 - 23	*5800239703	Chassis, L	
5 - 24	5800044300	Knob, Timer	
5 - 25	*5800154700	Rod, Joint	
5 - 26	*5800242000	Bracket, Rotary Switch	
5 - 27	*5200060100	PCB Assy, TIMER SW [All except US, C]	
	*5200060110	PCB Assy, TIMER SW [US, C]	
5 - 28	⚠*5320012100	Transformer, Power [J]	
	⚠*5320012200	Transformer, Power [US]	
	⚠*5320012300	Transformer, Power [GE]	
	⚠*5320012400	Transformer, Power [E, UK, A]	
	⚠*5320012500	Transformer, Power [C]	
5 - 29	5800242200	Button, Power	
5 - 30	*5534723000	Rod, Joint; A	
5 - 31	*5786360500	Pin, Snap	
5 - 32	*5800242100	Bracket, Power Switch	
5 - 33	*5200060500	PCB Assy, POWER SW [J]	
	*5200060510	PCB Assy, POWER SW [US]	
	*5200060520	PCB Assy, POWER SW [C]	
	*5200060530	PCB Assy, POWER SW [GE]	
	*5200060540	PCB Assy, POWER SW [E, UK, A]	
5 - 34	*5200078800	PCB Assy, SENSOR	
5 - 35	*5581038000	Clamper, Cord; A	
5 - 36	*5800349800	Cushion, A	
5 - 37	*5800213600	Bracket, SELECTOR PCB [GE, E, UK]	
5 - 38	*5200034900	PCB Assy, VOLTAGE SELECTOR [GE]	
5 - 39	*5200061201	PCB Assy, FUSE [E, UK]	

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.
[A]: AUSTRALIA [J]: JAPAN

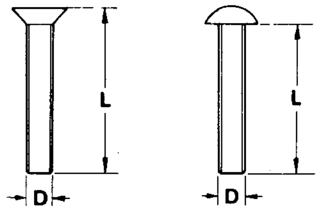
ASSEMBLING HARDWARE CODING LIST

All screws conform to ISO standards, and have crossrecessed heads, unless otherwise noted. ISO screws have the head inscribed with a point as in the figure to the right.

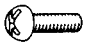
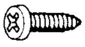
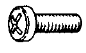
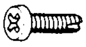
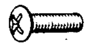
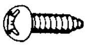
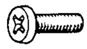
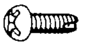
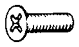
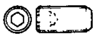
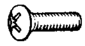
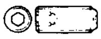
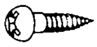
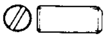
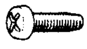
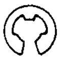
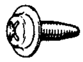
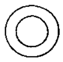
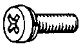
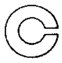
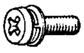
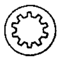
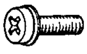
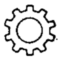
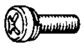
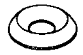
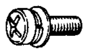
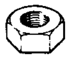


FOR EXAMPLE:

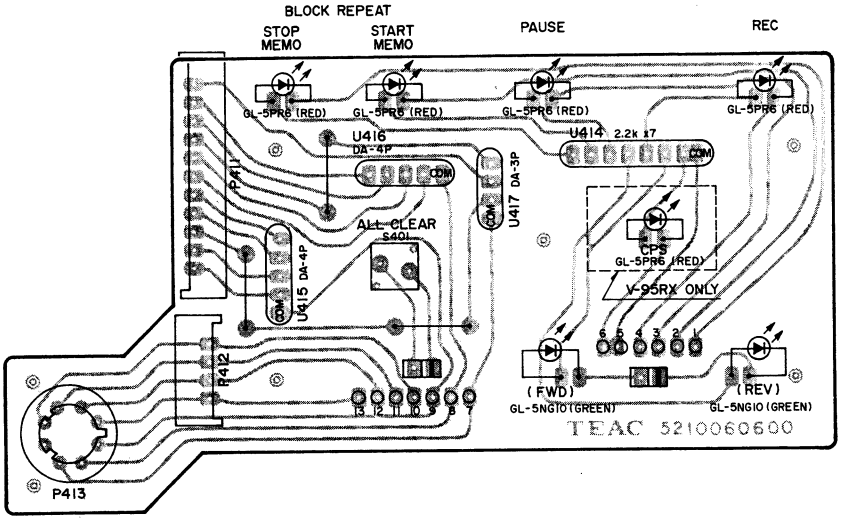
B M3 x 6
Length in mm (L)
Diameter in mm (D) *
Metric System
Nomenclature



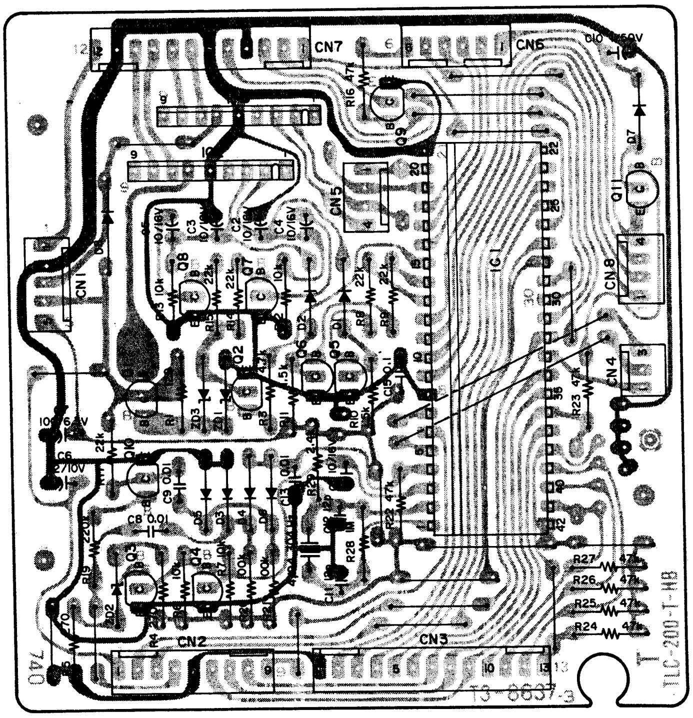
* Inner dia. for washers and nuts

	Code	*Name*	*Type*		*Code*	*Name*	*Type*
MACHINE SCREW	**R**	Round Head Screw		TAPPING SCREW	**BTA**	Binding Head Tapping Screw(A Type)	
	P	Pan Head Screw			**BTB**	Binding Head Tapping Screw(B Type)	
	T	Stove Head Screw (Truss)			**RTA**	Round Head Tapping Screw(A Type)	
	B	Binding Head Screw			**RTB**	Round Head Tapping Screw(B Type)	
	F	Flat Countersunk Head Screw		SETSCREW	**SF**	Hex Socket Setscrew(Flat Point)	
	O	Oval Countersunk Head Screw			**SC**	Hex Socket Setscrew(Cup Point)	
WOOD SCREW	**RW**	Round Head Wood Screw			**SS**	Slotted Socket Setscrew(Flat Point)	
TAPTITE SCREW	**PTT**	Pan Head Taptite Screw		WASHER	**E**	E-Ring (Retaining Washer)	
	WTT	Washer Head Taptite Screw			**W**	Flat Washer (Plain)	
SEMS SCREW	**BSA**	Binding Head SEMS Screw(A Type)			**SW**	Lock Washer (Spring)	
	BSB	Binding Head SEMS Screw(B Type)			**LWI**	Lock Washer (Internal Teeth)	
	BSF	Binding Head SEMS Screw(F Type)			**LWE**	Lock Washer (External Teeth)	
	PSA	Pan Head SEMS Screw(A Type)			**TW**	Trim Washer (Countersunk)	
	PSB	Pan Head SEMS Screw(B Type)		NUT	**N**	Hex Nut	

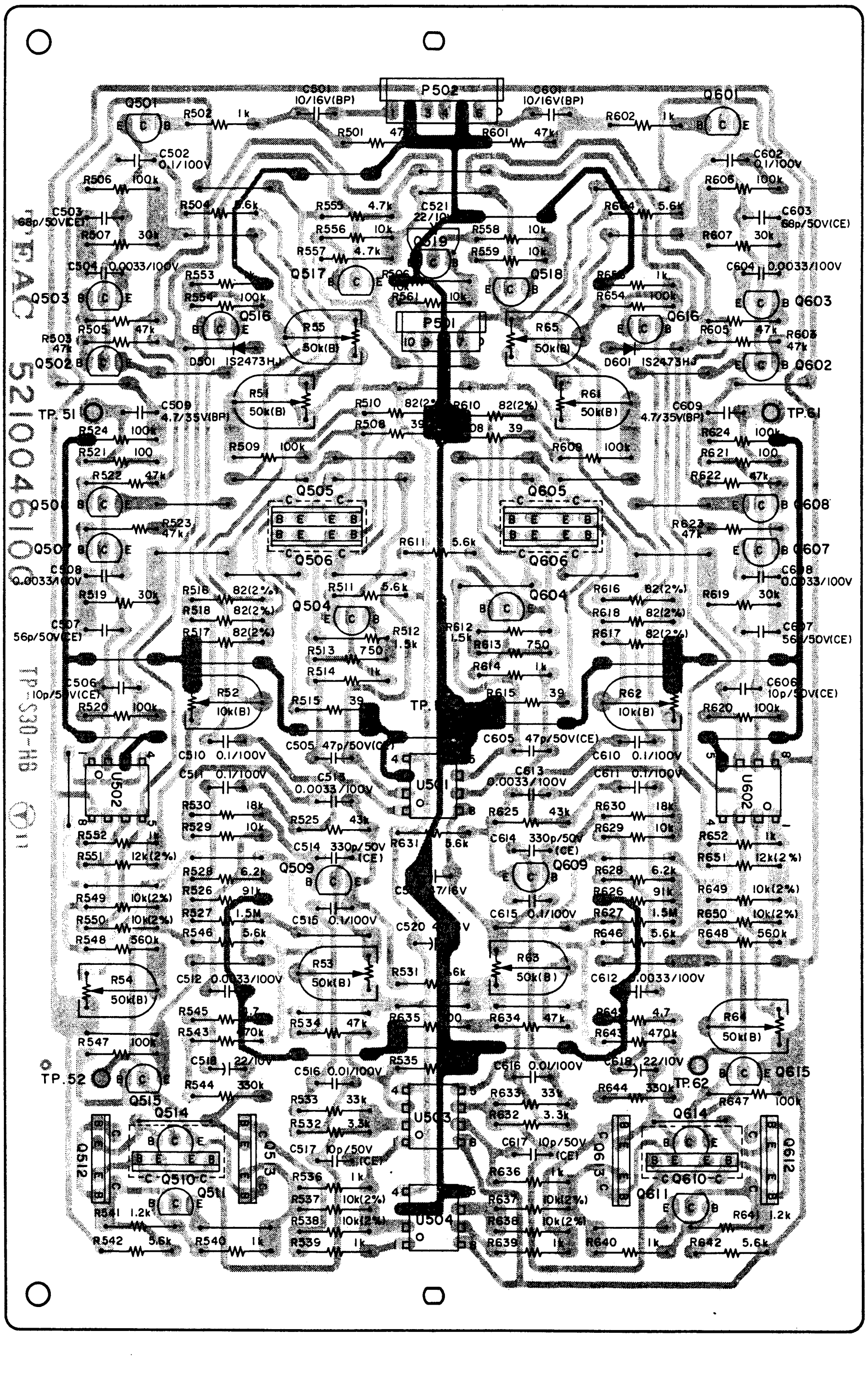
OPERATION SW PCB ASSY


BLOCK REPEAT
STOP MEMO
START MEMO
PAUSE
REC
GL-5PR6 (RED)
GL-5PR6 (RED)
GL-5PR6 (RED)
GL-5PR6 (RED)
U416
DA-4P
COM
U414 2.2k x7
COM
U417 DA-3P
COM
P411
ALL CLEAR
S401
U415 DA-4P
COM
CPS
GL-5PR6 (RED)
V-95RX ONLY
6 5 4 3 2 1
(FWD)
GL-5NG10 (GREEN)
(REV)
GL-5NG10 (GREEN)
P412
13 12 11 10 9 8 7
TEAC 5210060600
P413

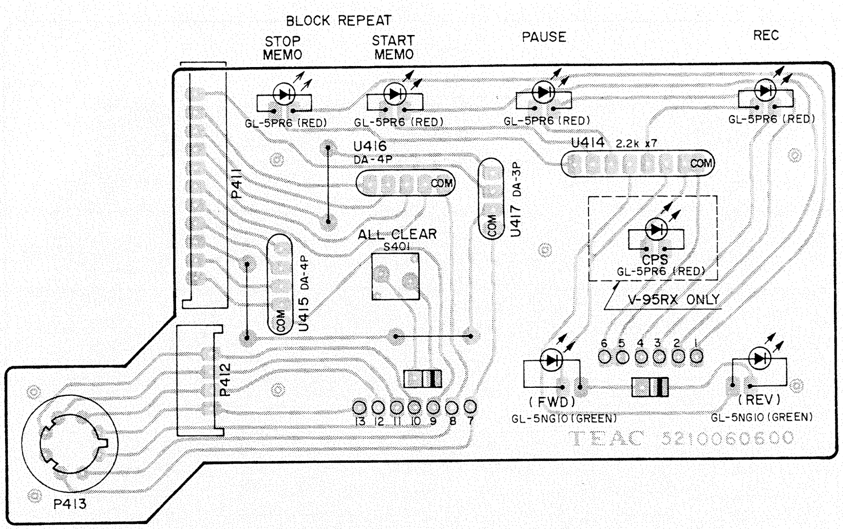
CONTROL PCB ASSY


CN7
CN6
C10
R16 47k
Q9
D7
Q11
CN5
C3 10/16V
C2 10/16V
C4 10/16V
Q8
Q7
IC1
CN8
CN1
D1
D2
R8
R9
Q6
Q5
CN4
R23 47k
C6 47/10V
C9 0.01
C8 0.01
220k
R19
Q3
Q4
D2
R28 1M
R22 47k
R27 47k
R26 47k
R25 47k
R24 47k
CN2
CN3
740
T3-8637-3
TLC-200-T-HB

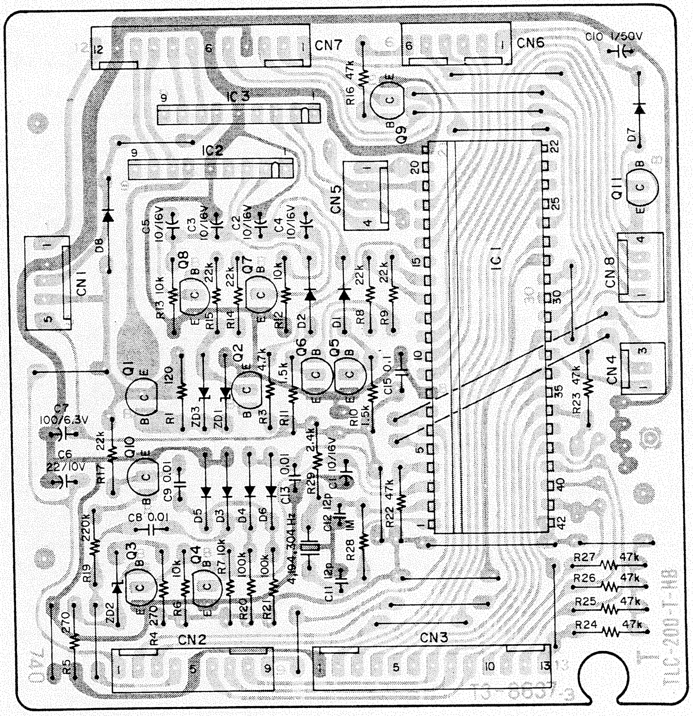
DBX PCB ASSY (V-95RX only)


P502
C501 10/16V(BP)
C601 10/16V(BP)
Q501
Q601
R502 1k
R602 1k
R501 47
R601 47k
C502 0.1/100V
C602 0.1/100V
R506 100k
R606 100k
C503 68p/50V(CE)
C603 68p/50V(CE)
R504 5.6k
R604 5.6k
R555 4.7k
C521 22/10V
R556 10k
R558 10k
R557 4.7k
R559 10k
Q519
R507 30k
R607 30k
C504 0.0033/100V
C604 0.0033/100V
R553
R653 1k
Q517
Q518
R554 100k
R654 100k
R560
R561 10k
Q503
Q603
Q516
Q616
P501
R55 50k(B)
R65 50k(B)
R505 47k
R605 47k
R503 47k
R603 47k
Q502
Q602
D501 1S2473H
D601 1S2473H
TEAC
52100046100
TP.51
TP.61
C509 4.7/35V(BP)
C609 4.7/35V(BP)
R51 50k(B)
R61 50k(B)
R510 82(2%)
R610 82(2%)
R508 39
R608 39
R524 100k
R624 100k
R521 100
R621 100
R509 100k
R609 100k
R522 47k
R622 47k
Q505
Q605
Q508
Q608
R523 47k
R623 47k
Q507
Q607
Q506
Q606
R611 5.6k
C508 0.0033/100V
C608 0.0033/100V
R519 30k
R619 30k
R516 82(2%)
R616 82(2%)
R511 5.6k
Q604
Q504
R518 82(2%)
R618 82(2%)
C507 56p/50V(CE)
C607 56p/50V(CE)
R517 82(2%)
R617 82(2%)
R512 1.5k
R612 1.5k
R513 750
R613 750
R514 1k
R614 1k
TP-S30-HB
C506 10p/50V(CE)
C606 10p/50V(CE)
R52 10k(B)
R62 10k(B)
R515 39
R615 39
TP
R520 100k
R620 100k
C505 47p/50V(CE)
C605 47p/50V(CE)
C510 0.1/100V
C610 0.1/100V
U502
U602
U501
C511 0.1/100V
C611 0.1/100V
C513 0.0033/100V
C613 0.0033/100V
R530 18k
R630 18k
R625 43k
R529 10k
R629 10k
R525 43k
R552 1k
R652 1k
C514 330p/50V(CE)
R631 5.6k
C614 330p/50V(CE)
R551 12k(2%)
R651 12k(2%)
R528 6.2k
R628 6.2k
Q509
Q609
R526 91k
R626 91k
R549 10k(2%)
R649 10k(2%)
R527 1.5M
R627 1.5M
C515 0.1/100V
C615 0.1/100V
R550 10k(2%)
R650 10k(2%)
R546 5.6k
R646 5.6k
C520 47/16V
R548 560k
R648 560k
R53 50k(B)
R63 50k(B)
R54 50k(B)
R64 50k(B)
C512 0.0033/100V
C612 0.0033/100V
R531 5.6k
R545 4.7
R645 4.7
R543 470k
R643 470k
R534 47k
R634 47k
R635 100
R547 100k
C518 22/10V
C618 22/10V
R535
C516 0.01/100V
C616 0.01/100V
TP.52
TP.62
Q515
Q615
R544 330k
R644 330k
R647 100k
Q514
Q614
R533 33k
R633 33k
R532 3.3k
R632 3.3k
U503
Q512
Q513
Q613
Q612
C517 10p/50V(CE)
C617 10p/50V(CE)
Q510
Q610
R536 1k
R636 1k
Q511
Q611
R537 10k(2%)
R637 10k(2%)
R541 1.2k
R641 1.2k
R538 10k(2%)
R638 10k(2%)
U504
R542 5.6k
R540 1k
R539 1k
R639 1k
R640 1k
R642 5.6k

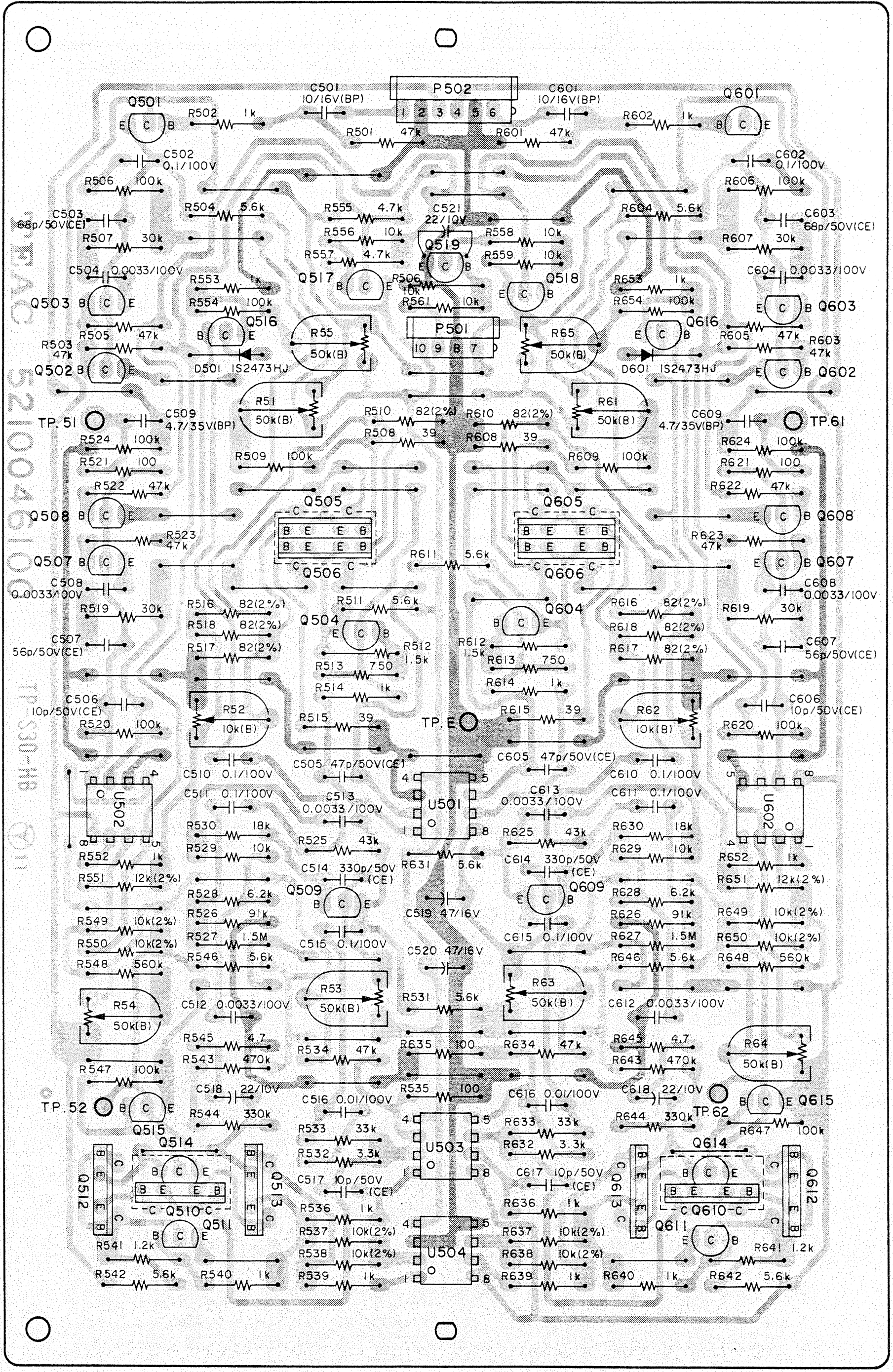
OPERATION SW PCB ASSY


BLOCK REPEAT
STOP MEMO
START MEMO
PAUSE
REC
GL-5PR6 (RED)
GL-5PR6 (RED)
GL-5PR6 (RED)
GL-5PR6 (RED)
U416
DA-4P
COM
U414 2.2k x7
COM
U417 DA-3P
COM
P411
ALL CLEAR
S401
CPS
GL-5PR6 (RED)
V-95RX ONLY
U415 DA-4P
COM
P412
6 5 4 3 2 1
13 12 11 10 9 8 7
(FWD)
GL-5NG10 (GREEN)
(REV)
GL-5NG10 (GREEN)
TEAC 5210060600
P413

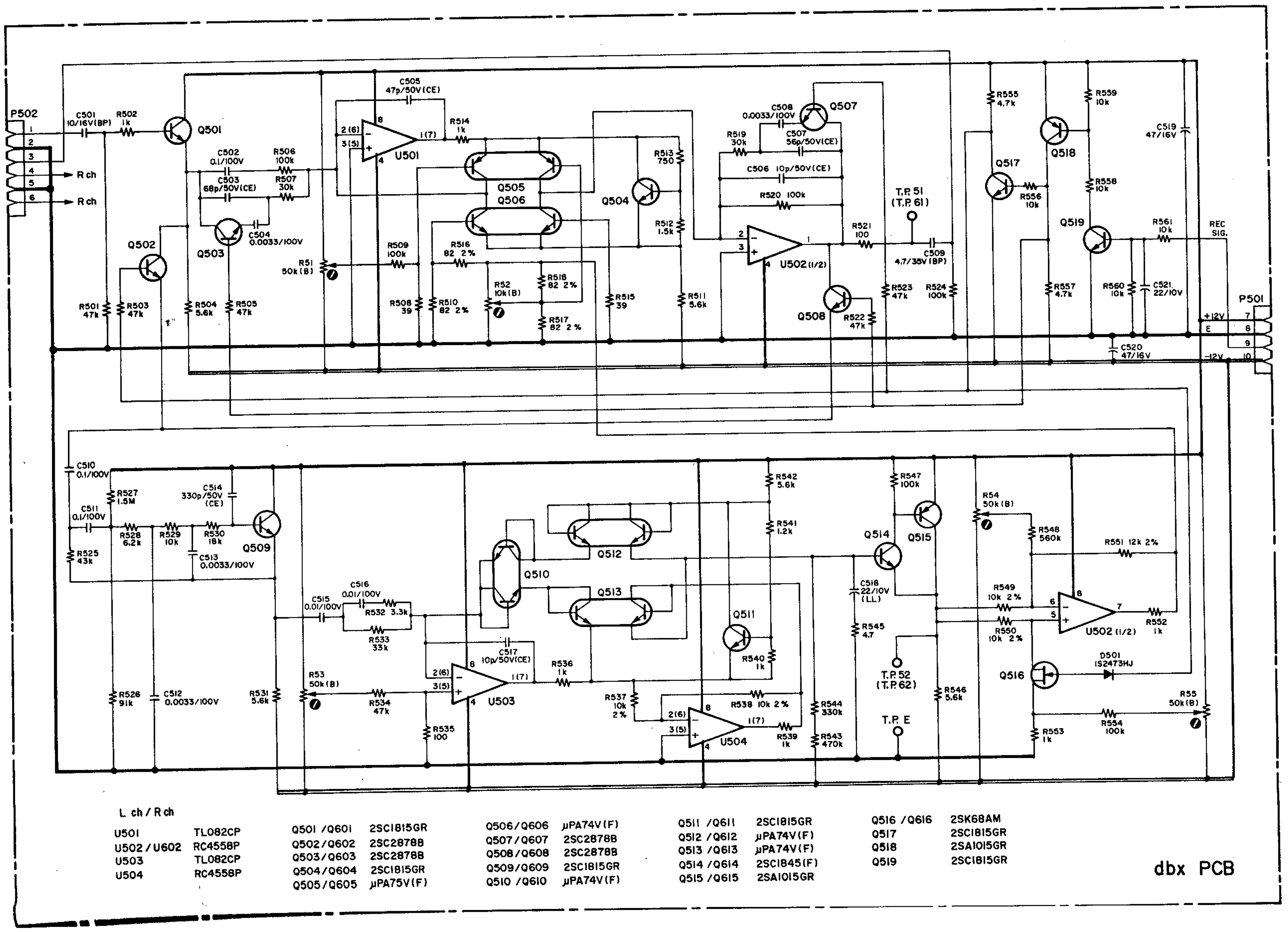
CONTROL PCB ASSY


CN7
CN6
C10 1/50V
R16 47k
Q9
IC3
IC2
D7
CN5
Q11
IC1
CN1
D8
C5 10/16V
C3 10/16V
C2 10/16V
C4 10/16V
Q8
Q7
R13 10k
R15 22k
R14 22k
R12 10k
D2
D1
R8 22k
R9 22k
CN8
Q1
Q2
Q6
Q5
R1 120
ZD3
ZD1
R3 4.7k
R11 1.5k
R10 1.5k
C15 0.1
CN4
R23 47k
C7 100/6.3V
C6 22/10V
R17 22k
Q10
C9 0.01
C13 0.01
R29 2.4k
C14 10/16V
C8 0.01
D5
D3
D4
D6
C12 12p
R28 1M
R22 47k
4.194304MHz
C11 12p
R19 220k
Q3
Q4
R6 10k
R7 10k
R20 100k
R21 100k
ZD2
R4 270
R5 270
R27 47k
R26 47k
R25 47k
R24 47k
CN2
CN3
740
TLC-200-T HB

DBX PCB ASSY (V-95RX only)


P502
1 2 3 4 5 6
C501 10/16V(BP)
C601 10/16V(BP)
Q501
Q601
R502 1k
R602 1k
R501 47k
R601 47k
C502 0.1/100V
C602 0.1/100V
R506 100k
R606 100k
C503 68p/50V(CE)
C603 68p/50V(CE)
R504 5.6k
R604 5.6k
R507 30k
R607 30k
R555 4.7k
R556 10k
R557 4.7k
C521 22/10V
Q519
R558 10k
R559 10k
C504 0.0033/100V
C604 0.0033/100V
R553 1k
R554 100k
Q517
Q518
R506 10k
R561 10k
R653 1k
R654 100k
Q503
Q603
Q516
Q616
P501
10 9 8 7
R55 50k(B)
R65 50k(B)
R505 47k
R605 47k
R503 47k
R603 47k
Q502
Q602
D501 1S2473HJ
D601 1S2473HJ
R51 50k(B)
R61 50k(B)
TP.51
TP.61
C509 4.7/35V(BP)
C609 4.7/35V(BP)
R510 82(2%)
R610 82(2%)
R508 39
R608 39
R524 100k
R624 100k
R521 100
R621 100
R509 100k
R609 100k
R522 47k
R622 47k
Q505
Q605
Q508
Q608
R523 47k
R623 47k
R611 5.6k
Q506
Q606
Q507
Q607
C508 0.0033/100V
C608 0.0033/100V
R519 30k
R619 30k
R516 82(2%)
R616 82(2%)
R511 5.6k
Q504
Q604
R518 82(2%)
R618 82(2%)
C507 56p/50V(CE)
C607 56p/50V(CE)
R517 82(2%)
R617 82(2%)
R512 1.5k
R612 1.5k
R513 750
R613 750
R514 1k
R614 1k
C506 10p/50V(CE)
C606 10p/50V(CE)
R52 10k(B)
R62 10k(B)
R515 39
R615 39
TP.E
R520 100k
R620 100k
C505 47p/50V(CE)
C605 47p/50V(CE)
C510 0.1/100V
C610 0.1/100V
C511 0.1/100V
C611 0.1/100V
U502
U501
U602
C513 0.0033/100V
C613 0.0033/100V
R530 18k
R630 18k
R529 10k
R629 10k
R525 43k
R625 43k
R552 1k
R652 1k
R551 12k(2%)
R651 12k(2%)
C514 330p/50V (CE)
C614 330p/50V (CE)
R631 5.6k
R528 6.2k
R628 6.2k
Q509
Q609
R526 91k
R626 91k
C519 47/16V
R549 10k(2%)
R649 10k(2%)
R527 1.5M
R627 1.5M
R550 10k(2%)
R650 10k(2%)
C515 0.1/100V
C615 0.1/100V
C520 47/16V
R546 5.6k
R646 5.6k
R548 560k
R648 560k
R53 50k(B)
R63 50k(B)
R54 50k(B)
R64 50k(B)
R531 5.6k
C512 0.0033/100V
C612 0.0033/100V
R545 4.7
R645 4.7
R543 470k
R643 470k
R534 47k
R634 47k
R635 100
R547 100k
R647 100k
C518 22/10V
C618 22/10V
R535 100
C516 0.01/100V
C616 0.01/100V
TP.52
TP.62
Q515
Q615
R544 330k
R644 330k
R533 33k
R633 33k
U503
R532 3.3k
R632 3.3k
Q514
Q614
Q512
Q513
Q613
Q612
C517 10p/50V (CE)
C617 10p/50V (CE)
Q510
Q610
R536 1k
R636 1k
Q511
Q611
R537 10k(2%)
R637 10k(2%)
U504
R538 10k(2%)
R638 10k(2%)
R541 1.2k
R641 1.2k
R542 5.6k
R642 5.6k
R540 1k
R640 1k
R539 1k
R639 1k
TEAC 5210046100
TP-S30-HB

SCHEMATIC DIAGRAM (DBX) (V-95RX only)


P502
Rch
Rch
P501
REC SIG.
+12V
E
-12V
C501 10/16V(BP)
R502 1k
Q501
Q502
Q503
Q504
Q505
Q506
Q507
Q508
Q509
Q510
Q511
Q512
Q513
Q514
Q515
Q516
Q517
Q518
Q519
U501
U502 (1/2)
U503
U504
C502 0.1/100V
C503 68p/50V(CE)
C504 0.0033/100V
C505 47p/50V(CE)
C506 10p/50V(CE)
C507 56p/50V(CE)
C508 0.0033/100V
C509 4.7/35V(BP)
C510 0.1/100V
C511 0.1/100V
C512 0.0033/100V
C513 0.0033/100V
C514 330p/50V (CE)
C515 0.01/100V
C516 0.01/100V
C517 10p/50V(CE)
C518 22/10V (LL)
C519 47/16V
C520 47/16V
C521 22/10V
R501 47k
R503 47k
R504 5.6k
R505 47k
R506 100k
R507 30k
R508 39
R509 100k
R510 82 2%
R511 5.6k
R512 1.5k
R513 750
R514 1k
R515 39
R516 82 2%
R517 82 2%
R518 82 2%
R519 30k
R520 100k
R521 100
R522 47k
R523 47k
R524 100k
R525 43k
R526 91k
R527 1.5M
R528 6.2k
R529 10k
R530 18k
R531 5.6k
R532 3.3k
R533 33k
R534 47k
R535 100
R536 1k
R537 10k 2%
R538 10k 2%
R539 1k
R540 1k
R541 1.2k
R542 5.6k
R543 470k
R544 330k
R545 4.7
R546 5.6k
R547 100k
R548 560k
R549 10k 2%
R550 10k 2%
R551 12k 2%
R552 1k
R553 1k
R554 100k
R555 4.7k
R556 10k
R557 4.7k
R558 10k
R559 10k
R560 10k
R561 10k
R51 50k(B)
R52 10k(B)
R53 50k(B)
R54 50k(B)
R55 50k(B)
D501 1S2473HJ
T.P.51 (T.P.61)
T.P.52 (T.P.62)
T.P. E
dbx PCB

L ch / R ch									
U501	TL082CP	Q501 / Q601	2SC1815GR	Q506 / Q606	μPA74V(F)	Q511 / Q611	2SC1815GR	Q516 / Q616	2SK68AM
U502 / U602	RC4558P	Q502 / Q602	2SC2878B	Q507 / Q607	2SC2878B	Q512 / Q612	μPA74V(F)	Q517	2SC1815GR
U503	TL082CP	Q503 / Q603	2SC2878B	Q508 / Q608	2SC2878B	Q513 / Q613	μPA74V(F)	Q518	2SA1015GR
U504	RC4558P	Q504 / Q604	2SC1815GR	Q509 / Q609	2SC1815GR	Q514 / Q614	2SC1845(F)	Q519	2SC1815GR
		Q505 / Q605	μPA75V(F)	Q510 / Q610	μPA74V(F)	Q515 / Q615	2SA1015GR		

REC/PLAY AMPL PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200059103	PCB Assy (V-95RX/V-R1) [All except US, C]
	5200059113	PCB Assy (V-95RX/V-R1) [US, C]
	5200059123	PCB Assy (V-90R/V-R2) [All except US, C]
	5200059133	PCB Assy (V-90R/V-R2) [US, C]
	5210059101	PCB [All except US, C]
	5210062401	PCB [US, C]
	IC's	
U102, U202	5220412600	TA7629P
U105	5220019400	TC4069 UBP (V-95RX/V-R2)
U106	5220414300	NJM4560D
U301	⚠5220413000	NJM78M12A
U302	⚠5220413800	NJM79M12A
U303	⚠5147058000	NJM78M05A
	TRANSISTORS	
Q101, Q201	5230777200	KTN5014GR
Q102, Q202	5230777200	KTN5014GR
Q103, Q203	5230775000	2SC2878B
Q104	5145150000	2SA1015GR
Q105, Q205	5230777200	KTN5014GR
Q106, Q206	5145102000	FET 2SK68AL
Q108	5230777200	KTN5014GR
Q109	5230777200	KTN5014GR
Q110, Q210	5230777200	KTN5014GR
Q111, Q211	5230777200	KTN5014GR
Q112, Q212	5230777200	KTN5014GR
Q113, Q213	5230777200	KTN5014GR
Q114, Q214	5230777200	KTN5014GR
Q115, Q215	5230777200	KTN5014GR
Q116	5230777200	KTN5014GR
Q117	5231755500	2SD985
Q118	5145150000	2SA1015GR
Q119, Q219	5230777200	KTN5014GR
Q120, Q220	5230777200	KTN5014GR
Q301	⚠5231755500	2SD985
Q302	5145084000	2SA934Q
Q303	5145084000	2SA934Q
Q304	5231758500	2SD1140
Q305	5231758500	2SD1140
Q306	5145084000	2SA934Q
Q307	5145084000	2SA934Q
Q308	5231758500	2SD1140
Q309	5231758500	2SD1140
Q314	⚠5231755500	2SD985
Q315	⚠5145088000	2SD313F
Q316	5230777200	KTN5014GR
Q318	5230777200	KTN5014GR (V-90R/V-R2)
Q319	5230777200	KTN5014GR (V-90R/V-R2)
	DIODES	
D9	5143118000	1S2473HJ
D101, D201	5143118000	1S2473HJ (V-95RX/V-R1)
D102, D202	5143118000	1S2473HJ (V-95RX/V-R1)
D103, D203	5143118000	1S2473HJ
D104	5143118000	1S2473HJ
D105, D205	5143118000	1S2473HJ
D106	5143118000	1S2473HJ
D107	5143118000	1S2473HJ
D109	5224013210	DS135
D301	⚠5228005700	LBA-01
D302	⚠5228005600	MBK3-02
D303	⚠5224014400	SM-1A-02LFA
D304	⚠5224014400	SM-1A-02LFA
D305	5143198000	Zener EQA01-13R
D306	⚠5224014400	SM-1A-02LFA
D307~D310	5143118000	1S2473HJ
D311	⚠5224014400	SM-1A-02LFA
D312	5224520500	Zener GZA9.1L
	CARBON RESISTORS **All resistors are rated ±5% tolerance and ¼ watt unless otherwise noted.**	
R108, R208	5183088000	1.8kΩ
R109, R209	5183132000	120kΩ
R110, R210	5183106000	10kΩ
R111, R211	5183130000	100kΩ
R112, R212	5183106000	10kΩ
R113, R213	5183064000	180Ω
R114, R214	5183094000	3.3kΩ
R115, R215	5183122000	47kΩ
R116, R216	5183134000	150kΩ
R117, R217	5183140000	270kΩ
R118	5183116000	27kΩ
R119, R219	5183082000	1kΩ
R126, R226	5183106000	10kΩ
R127	5183106000	10kΩ
R128	5183106000	10kΩ
R129, R229	5183132000	120kΩ
R130	5183084000	1.2kΩ (V-95RX/V-R1)
R131, R231	5183106000	10kΩ (V-95RX/V-R1)
R132, R232	5183154000	1MΩ (V-95RX/V-R1)
R133	5183122000	47kΩ (V-95RX/V-R1)
R134	5183122000	47kΩ (V-95RX/V-R1)
R135	5183138000	220kΩ (V-95RX/V-R1)
R136, R236	5183130000	100kΩ
R137, R237	5183082000	1kΩ
R138, R238	5183106000	10kΩ
R139, R239	5183098000	4.7kΩ
R140, R240	5183090000	2.2kΩ
R141	5183118000	33kΩ
R142, R242	5183092000	2.7kΩ
R143, R243	5183094000	3.3kΩ
R144, R244	5183106000	10kΩ
R146	5183106000	10kΩ
R147, R247	5183126000	68kΩ
R149	5183132000	120kΩ
R150, R250	5183106000	10kΩ
R151, R251	5183106000	10kΩ
R152, R252	5183148000	560kΩ
R153, R253	5183118000	33kΩ
R154, R254	5183058000	100Ω
R155, R255	5183114000	22kΩ
R156, R256	5183050000	47Ω
R157, R257	5183084000	1.2kΩ
R158, R258	5183106000	10kΩ
R159, R259	5183106000	10kΩ
R161, R261	5183132000	120kΩ

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.
[A]: AUSTRALIA [J]: JAPAN [L]: LIMITED AREA

REF. NO.	PARTS NO.	DESCRIPTION	
R162, R262	5183098000	4.7kΩ	
R163, R263	5183132000	120kΩ	
R164, R264	5183106000	10kΩ	
R165	5183118000	33kΩ	
R166, R266	5183058000	100Ω	
R167	5183082000	1kΩ	
R168	5183106000	10kΩ	
R169	5183106000	10kΩ	
R170	5183130000	100kΩ	
R171	5183082000	1kΩ	
R172	5183092000	2.7kΩ	
R174	5183112000	18kΩ	
R177, R277	5183090000	2.2kΩ	
R178, R278	5183110000	15kΩ	
R199, R299	5183092000	2.7kΩ	
R301	5183082000	1kΩ	
R302	5183106000	10kΩ	
R303	5183082000	1kΩ	
R304	5183082000	1kΩ	
R305	5183130000	100kΩ	
R306	5183104000	8.2kΩ	
R307	5183130000	100kΩ	
R308	5183104000	8.2kΩ	
R309	5183082000	1kΩ	
R310	5183082000	1kΩ	
R311	5183130000	100kΩ	
R312	5183104000	8.2kΩ	
R313	5183130000	100kΩ	
R314	5183104000	8.2kΩ	
R319	5183068000	270Ω	
R321	⚠5180078000	680Ω	1/2W
R322	5183106000	10kΩ	
R324	5183098000	4.7kΩ	(V-90R/V-R2)
R325	5183114000	22kΩ	(V-90R/V-R2)
R326	5183098000	4.7kΩ	(V-90R/V-R2)
R327	5183114000	22kΩ	(V-90R/V-R2)
R501, R601	5183106000	10kΩ	
R502, R602	5183106000	10kΩ	
R503, R603	5183118000	33kΩ	
R504, R604	5183118000	33kΩ	
R505, R605	5183058000	100Ω	
R508	5240173000	100kΩ	
R608	5183130000	100kΩ	
R509~R511	5183106000	10kΩ	
R512	5183132000	120kΩ	

CAPACITORS

REF. NO.	PARTS NO.	DESCRIPTION				
C107, C207	5170435000	Mylar	0.027μF	100V	5%	
C108, C208	5173054800	Elec.	220μF	16V		
C109, C209	5173556800	Elec.	1μF	50V		
C110, C210	5170411000	Mylar	0.0027μF	100V	5%	
C111, C211	5173011800	Elec.	10μF	25V		
C112, C212	5173011800	Elec.	10μF	25V		
C113, C213	5173011800	Elec.	10μF	25V		
C114, C214	5170419000	Mylar	0.0056μF	100V	5%	
C115, C215	5170435000	Mylar	0.027μF	100V	5%	
C116, C216	5170417000	Mylar	0.0047μF	100V	5%	
C117, C217	5170441000	Mylar	0.047μF	100V	5%	
C118, C218	5173011800	Elec.	10μF	25V		
C119, C219	5170449000	Mylar	0.1μF	100V	5%	
C120, C220	5260225802	Elec.	0.33μF	50V		
C121	5172990800	Elec.	0.47μF	50V		
C125, C225	5170425000	Mylar	0.01μF	100V	5%	(V-95RX/V-R1)
C126, C226	5173005800	Elec.	4.7μF	35V		(V-95RX/V-R1)
C127	5172996800	Elec.	2.2μF	50V		(V-95RX/V-R1)
C128, C228	5260065612	Elec.	1μF	50V	(BP)	
C129	5173011800	Elec.	10μF	25V		
C130	5173011800	Elec.	10μF	25V		
C131, C231	5173011800	Elec.	10μF	25V		
C132, C232	5173045800	Elec.	100μF	16V		
C133, C233	5172990800	Elec.	0.47μF	50V		
C134, C234	5173011800	Elec.	10μF	25V		
C135, C235	5173045800	Elec.	100μF	16V		
C136, C236	5260065612	Elec.	1μF	50V	(BP)	
C137, C237	5170433000	Mylar	0.022μF	100V	5%	
C138, C238	5170429000	Mylar	0.015μF	100V	5%	
C139, C239	5170433000	Mylar	0.022μF	100V	5%	
C140, C240	5172660000	Polyst.	100pF	125V	10%	
C141	5173011800	Elec.	10μF	25V		
C143	5173037800	Elec.	47μF	25V		
C155	5173011800	Elec.	10μF	25V		
C156, C256	5170423000	Mylar	0.0082μF	100V	5%	
C10	5173011800	Elec.	10μF	25V		
C301	⚠5173089800	Elec.	2200μF	25V		
C302	⚠5173089800	Elec.	2200μF	25V		
C303	5173036800	Elec.	47μF	16V		
C304	5173036800	Elec.	47μF	16V		
C305	⚠5173082800	Elec.	1000μF	25V		
C306	5173011800	Elec.	10μF	25V		
C307	5173011800	Elec.	10μF	25V		
C308	5173036800	Elec.	47μF	16V		
C309	5172996800	Elec.	2.2μF	50V		
C310	5173005800	Elec.	4.7μF	35V		
C311	5260065812	Elec.	2.2μF	50V	(BP)	
C312	5260065812	Elec.	2.2μF	50V	(BP)	
C313	5172996800	Elec.	2.2μF	50V		
C314	5173005800	Elec.	4.7μF	35V		
C316	⚠5262002102	Elec.	4700μF	25V		
C317	5173037800	Elec.	47μF	25V		
C318	⚠5262002102	Elec.	4700μF	25V		

VARIABLE RESISTORS

REF. NO.	PARTS NO.	DESCRIPTION	
R10, R20	5280003602	Semi-fixed	20kΩ (B)
R11, R21	5280003602	Semi-fixed	20kΩ (B)
R12, R22	5280004002	Semi-fixed	50kΩ (B)
R16, R26	5280003502	Semi-fixed	10kΩ (B)
R17, R27	5280003502	Semi-fixed	10kΩ (B)
R18, R28	5280004202	Semi-fixed	100kΩ (B)
R19, R29	5280004202	Semi-fixed	100kΩ (B)
R30	5280004202	Semi-fixed	100kΩ (B)

REF. NO.	PARTS NO.	DESCRIPTION
	COILS	
L101, L201	5286000100	Choke 4.2mH (Variable)
L102	5160151000	Choke 1.2mH (fixed)
L103, L203	5160161000	Choke 8.2mH (fixed)
	MISCELLANEOUS	
U103, U203	5286006100	Filter, Low-pass; 19kHz
U107, U207	5286006300	Coil, Trap; 85kHz
U108	5292201200	OSC Unit, 85kHz
S101, S102	5302101100	Switch, w/Magnet
S103	5300023600	Switch, Push; 2–2 (3-gang)
S104, S105	5300023700	Switch, Push; 4–2 (V-95RX/V-R1)
	5300023800	Switch, Push; 2–2 (V-90R/V-R2)
P1, P2	5334022100	Connector Plug, 6P
P3, P4	5334022200	Connector Plug, 2P
P5	5122127000	Connector Plug, 3P
P6	5122126000	Connector Plug, 2P
P7	5122126000	Connector Plug, 2P (V-95RX/V-R1)
P8	5122126000	Connector Plug, 2P
	5330506600	Pin Jack, 4P
	5800243600	Heatsink
	5317000300	Plate, Insulating; A
	5033291000	Plate, Insulating
	5033295000	Tube, Insulating

PLAYBACK AMPL PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200064200	PCB Assy [All except US, C]
	5200064210	PCB Assy [US, C]
	5210064200	PCB [All except US, C]
	5210064300	PCB [US, C]
	IC	
U101	5220412500	NJM4562D
	CARBON RESISTORS All resistors are rayted ±5% tolerance and ¼ watt.	
R101, R201	5183126000	68kΩ
R102, R202	5183054000	68Ω
R103	5183074000	470Ω
R104, R204	5183132000	120kΩ
R105, R205	5183098000	4.7kΩ
R106	5183074000	470Ω
R107, R207	5183090000	2.2kΩ
	CAPACITORS	
C101, C201	5172321000	Ceramic 560pF 50V 10%
C102	5173054800	Elec. 220μF 16V
C103, C203	5172312000	Ceramic 100pF 50V 10%
C104	5173054800	Elec. 220μF 16V
C105, C205	5170435000	Mylar 0.027μF 100V 5%
C106, C206	5260065812	Elec. 2.2μF 50V (BP)
C145, C245	5173044800	Elec. 100μF 10V
	5334023300	Connector Plug, 3P
	5334023500	Connector Plug, 5P

MIC AMPL PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200059601	PCB Assy [All except US, C]
	5200059611	PCB Assy [US, C]
	5210059600	PCB [All except US, C]
	5210062900	PCB [US, C]
	IC	
U104	5220414300	NJM4560D
	TRANSISTORS	
Q107, Q207	5145119000	2SC1844F
	CARBON RESISTORS All resistors are rated ±5% tolerance and ¼ watt.	
R120, R220	5183090000	2.2kΩ
R121, R221	5183138000	220kΩ
R122, R222	5183138000	220kΩ
R123, R223	5183090000	2.2kΩ
R124, R224	5183046000	33Ω
R125, R225	5183106000	10kΩ
R179, R279	5183120000	39kΩ
R180, R280	5183134000	150kΩ
R181, R281	5183132000	120kΩ
R182, R282	5183064000	180Ω
R183, R283	5183161000	2MΩ
R184, R284	5183082000	1kΩ
R185, R285	5183108000	12kΩ
R186, R286	5183050000	47Ω
R187, R287	5183132000	120kΩ
R188, R288	5183094000	3.3kΩ
	CAPACITORS	
C122, C222	5260065612	Elec. 1μF 50V (BP)
C123	5172992800	Elec. 1μF 50V
C124	5172992800	Elec. 1μF 50V
C145, C245	5173045800	Elec. 100μF 16V
C146, C246	5173011800	Elec. 10μF 25V
C147, C247	5172312000	Ceramic 100pF 50V 10%
C148, C248	5173053800	Elec. 220μF 10V
C149, C249	5260073512	Elec. 4.7μF 25V (BP)
	MISCELLANEOUS	
	5122146000	Connector Plug, 3P
	5330008200	Jack, MIC
	5330008100	Jack, PHONES
	5334022300	Connector Plug, 9P

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.
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CONTROL PCB-133 ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200059500	PCB Assy (V-95RX/V-R1) [All except US, C]
	5200059510	PCB Assy (V-95RX/V-R1) [US, C]
	5200059520	PCB Assy (V-90R/V-R2) [All except US, C]
	5200059530	PCB Assy (V-90R/V-R2) [US, C]
	5210059500	PCB [All except US, C]
	5210062800	PCB [US, C]

IC's

REF. NO.	PARTS NO.	DESCRIPTION
U401	5220019400	TC4069UBP
U402	5220019100	TC4011BP
U403	5220019400	TC4069UBP
U404	5220019200	TC4013BP
U405	5220019100	TC4011BP
U406	5220019500	TC4071BP
U407	5220019000	TC4001BP
U408	5220019100	TC4011BP
U409	5220019400	TC4069UBP
U410	5220013300	TE5002BP
U411	5220019300	TC4015BP
U412	5220019000	TC4001BP (V-95RX/VR1)
U413	5220014000	MSM4049RS

TRANSISTORS

REF. NO.	PARTS NO.	DESCRIPTION
Q401~Q403	5230777200	KTN5014GR
Q404	5230777200	KTN5014GR (V-95RX/V-R1)
Q405~Q410	5230777200	KTN5014GR
Q412~Q414	5145150000	2SA1015GR
Q415	5145150000	2SA1015GR (V-95RX/V-R1)
Q416~Q420	5145150000	2SA1015GR
Q423	5230777200	KTN5014GR
Q424	5230777200	KTN5014GR (V-95RX/V-R1)
Q425~Q427	5230777200	KTN5014GR
Q428	5145150000	2SA1015GR (V-95RX/V-R1)
Q429	5145150000	2SA1015GR

DIODES

REF. NO.	PARTS NO.	DESCRIPTION
D401~D407	5143118000	1S2473HJ
D408	5143118000	1S2473HJ (V-95RX/V-R1)
D409~D420	5143118000	1S2473HJ

CARBON RESISTORS

All resistors are rated ±5% tolerance and ¼ watt.

REF. NO.	PARTS NO.	DESCRIPTION
R401~R404	5183122000	47kΩ
R405	5183114000	22kΩ
R406	5183130000	100kΩ
R407	5183154000	1MΩ
R408	5183134000	150kΩ
R410	5183090000	2.2kΩ
R411	5183110000	15kΩ
R412	5183074000	470Ω
R413	5183130000	100kΩ
R414	5183134000	150kΩ
R415	5183098000	4.7kΩ
R416	5183130000	100kΩ
R417	5183134000	150kΩ
R418	5182114000	22kΩ
R419	5183098000	4.7kΩ
R420	5183138000	220kΩ
R421	5183130000	100kΩ
R422	5183100000	5.6kΩ
R423	5183100000	5.6kΩ (V-95RX/V-R1)
R424	5183100000	5.6kΩ
R425	5183100000	5.6kΩ (V-95RX/V-R1)
R426, R427	5183100000	5.6kΩ
R428	5183098000	4.7kΩ
R429	5183114000	22kΩ
R430	5183098000	4.7kΩ
R431	5183150000	680kΩ
R432	5183130000	100kΩ
R433	5183154000	1MΩ
R434	5183138000	220kΩ
R435	5183106000	10kΩ
R436~R442	5183060000	120Ω
R443	5183060000	120Ω (V-95RX/V-R1)
R444	5183038000	15Ω
R445	5183058000	100Ω

CAPACITORS

REF. NO.	PARTS NO.	DESCRIPTION
C401, C402	5173005800	Elec. 4.7µF 35V
C403	5173005800	Elec. 4.7µF 35V (V-95RX/V-R1)
C404~C409	5173005800	Elec. 4.7µF 35V
C412	5173005800	Elec. 4.7µF 35V
C413	5173011800	Elec. 10µF 25V
C414	5172992800	Elec. 1µF 50V
C415	5172996800	Elec. 2.2µF 50V
C416	5172996800	Elec. 2.2µF 50V
C417	5173011800	Elec. 10µF 25V
C418	5170437000	Mylar 0.033µF 100V 5%
C419	5173005800	Elec. 4.7µF 35V
C420	5173027800	Elec. 33µF 16V

CONNECTORS

REF. NO.	PARTS NO.	DESCRIPTION
P402	5122130000	Plug, 6P
P403	5122132000	Plug, 8P
P404	5122129000	Plug, 5P
P406	5336104100	Socket, WP22-1W
P407~P409	5336104200	Socket, MWP2P-1B
P410	5336104100	Socket, WP22-1W
P413	5122126000	Plug, 2P
P414	5122128000	Plug, 4P

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[A]: AUSTRALIA [J]: JAPAN [L]: LIMITED AREA

SENSOR PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200078800	PCB Assy
	5210078800	PCB
	5334023300	Connector Plug, 3P
P405	5122127000	Connector Plug, 3P
RT40	5143127000	Termistor, S5C14
Q450	5230777200	Transistor, KTN5014GR
R40	5280001702	Variable Res, 100kΩ(B) Semi-fixed
R450	5183100000	Carbon Res. 5.6kΩ ¼W 5%
R451	5183118000	Carbon Res. 33kΩ ¼W 5%
R452	5183092000	Carbon Res. 2.7kΩ ¼W 5%

JOINT PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200079700	PCB Assy
	5210079700	PCB
U420	5228007700	Diode Array, DA-8P
U421	5228007900	Diode Array, DA-8N
P401	5122131000	Connector Plug, 7P
P415	5334025700	Connector Plug, 7P

DBX PCB ASSY (V-95RX/V-R1)

REF. NO.	PARTS NO.	DESCRIPTION
	5200046100	PCB-105 Assy
	5210046100	PCB-105
	IC's	
U501	5220407100	TL082CP
U502, U602	5220406700	RC4558P
U503	5220407100	TL082CP
U504	5220406700	RC4558P
	TRANSISTORS	
Q501, Q601	5145151000	2SC1815GR
Q502, Q602	5230775000	2SC2878B
Q503, Q603	5230775000	2SC2878B
Q504, Q604	5145151000	2SC1815GR
Q505, Q605	5232250300	µPA75VF (Pair)
Q505, Q605	5232250100	µPA74VF (Pair)
Q507, Q607	5230775000	2SC2878B
Q508, Q608	5230775000	2SC2878B
Q509, Q609	5145151000	2SC1815GR
Q510, Q610	5232250100	µPA74VF (Pair)
Q511, Q611	5145151000	2SC1815GR
Q512, Q612	5232250100	µPA74VF
Q513, Q613	5232250100	µPA74VF
Q514, Q614	5230774300	2SC1845F
Q515, Q615	5145150000	2SA1015GR
Q516, Q616	5145102000	FET 2SK68AL
Q517	5145151000	2SC1815GR
Q518	5145150000	2SA1015GR
Q519	5145151000	2SC1815GR

REF. NO.	PARTS NO.	DESCRIPTION
	DIODES	
D501, D601	5143118000	1S2473HJ
	CARBON RESISTORS	
	All resistors are rated ±5% tolerance and ¼ watt unless otherwise noted.	
R501, R601	5183122000	47kΩ
R502, R602	5183082000	1kΩ
R503, R603	5183122000	47kΩ
R504, R604	5183100000	5.6kΩ
R505, R605	5183122000	47kΩ
R506, R606	5183130000	100kΩ
R507, R607	5183117000	30kΩ
R508, R608	5183048000	39Ω
R509, R609	5183130000	100kΩ
R510, R610	5185066000	82Ω 2%
R511, R611	5183100000	5.6kΩ
R512, R612	5183086000	1.5kΩ
R513, R613	5183079000	750Ω
R514, R614	5183082000	1kΩ
R515, R615	5183048000	39Ω
R516, R616	5185066000	82Ω 2%
R517, R617	5185066000	82Ω 2%
R518, R618	5185066000	82Ω 2%
R519, R619	5183117000	30kΩ
R520, R620	5183130000	100kΩ
R521, R621	5183058000	100Ω
R522, R622	5183122000	47kΩ
R523, R623	5183122000	47kΩ
R524, R624	5183130000	100kΩ
R525, R625	5183121000	43kΩ
R526, R626	5183129000	91kΩ
R527, R627	5183158000	1.5MΩ
R528, R628	5183101000	6.2kΩ
R529, R629	5183106000	10kΩ
R530, R630	5183112000	18kΩ
R531, R631	5183100000	5.6kΩ
R532, R632	5183094000	3.3kΩ
R533, R633	5183118000	33kΩ
R534, R634	5183122000	47kΩ
R535, R635	5183058000	100Ω
R536, R636	5183082000	1kΩ
R537, R637	5185116000	10kΩ
R538, R638	5185116000	10kΩ
R539, R639	5183082000	1kΩ
R540, R640	5183082000	1kΩ
R541, R641	5183084000	1.2kΩ
R542, R642	5183100000	5.6kΩ
R543, R643	5183146000	470kΩ
R544, R644	5183142000	330kΩ
R545, R645	5183026000	4.7Ω
R546, R646	5183100000	5.6kΩ
R547, R647	5183130000	100kΩ
R548, R648	5183148000	560kΩ
R549, R649	5185116000	10kΩ
R550, R650	5185116000	10kΩ
R551, R651	5185118000	12kΩ
R552, R652	5183082000	1kΩ
R553, R653	5183082000	1kΩ
R554, R654	5183130000	100kΩ
R555	5183098000	4.7kΩ

REF. NO.	PARTS NO.	DESCRIPTION
R556	5183106000	10kΩ
R557	5183098000	4.7kΩ
R558	5183106000	10kΩ
R559	5183106000	10kΩ
R560	5183106000	10kΩ
R561	5183106000	10kΩ
	CAPACITORS	
C501, C601	5260067010	Elec. 10μF 16V (BP)
C502, C602	5263162213	Meta. 0.1μF 50V 5%
C503, C603	5172310000	Ceramic 68pF 50V 10%
C504, C604	5170413000	Mylar 0.0033μF 100V 5%
C505, C605	5172308000	Ceramic 47pF 50V 10%
C506, C606	5172300000	Ceramic 10pF 50V 10%
C507, C607	5172309000	Ceramic 56pF 50V 10%
C508, C608	5170413000	Mylar 0.0033μF 100V 5%
C509, C609	5260066510	Elec. 4.7μF 35V (BP)
C510, C610	5263162200	Meta. 0.1μF 50V 5%
C511, C611	5263162213	Meta. 0.1μF 50V 5%
C512, C612	5170413000	Mylar 0.0033μF 100V 5%
C513, C613	5170413000	Mylar 0.0033μF 100V 5%
C514, C614	5172318000	Ceramic 330pF 50V 10%
C515, C615	5263162213	Meta. 0.1μF 50V 5%
C516, C616	5170425000	Mylar 0.01μF 100V 5%
C517, C617	5172300000	Ceramic 10pF 50V 10%
C518, C618	5260227510	Elec. 22μF 10V
C519	5173036000	Elec. 47μF 16V
C520	5173036000	Elec. 47μF 16V
C521	5173017000	Elec. 22μF 10V
	VARIABLE RESISTORS	
R51, R61	5150094000	Semi-fixed 50kΩ(B)
R52, R62	5150092000	Semi-fixed 10kΩ(B)
R53, R63	5150094000	Semi-fixed 50kΩ(B)
R54, R64	5150094000	Semi-fixed 50kΩ(B)
R55, R65	5150094000	Semi-fixed 50kΩ(B)
	MISCELLANEOUS	
P501	5336088400	Connector Socket, 4P
P502	5336088600	Connector Socket, 6P
	5800140700	Clip, Transistor
	5544750000	Pin, TP

LEVEL METER PCB A ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200059700	PCB A Assy [All except US, C]
	5200059710	PCB A Assy [US, C]
	5210059700	PCB A [All except US, C]
	5210063000	PCB A [US, C]
U209	5220414200	IR2E04
U210	5242105200	Resistor Array 1.5kΩ x 7
R296	5183116000	Carbon Res. 27kΩ ¼W 5%
R297	5183106000	Carbon Res. 10kΩ ¼W 5%
R298	5183090000	Carbon Res. 2.2kΩ ¼W 5%
C250~C252	5173011800	Elec. Cap. 10μF 25V
	5317001000	Connector Pin

LEVEL METER PCB B ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200059801	PCB B Assy [All except US, C]
	5200059811	PCB B Assy [US, C]
	5210059801	PCB B [All except US, C]
	5210063101	PCB B [US, C]
U109	5220414200	IR2E04
R189~R195	5183086000	Carbon Res. 1.5kΩ ¼W 5%
R196	5183116000	Carbon Res. 27kΩ ¼W 5%
C150~C152	5173011800	Elec. Cap. 10μF 25V

MOTOR VR PCB ASSY (V-95RX/V-R1)

REF. NO.	PARTS NO.	DESCRIPTION
	5200059200	PCB Assy [All except US, C]
	5200059210	PCB Assy [US, C]
	5210059200	PCB [All except US, C]
	5210062500	PCB [US, C]
Q310, Q311	5145084000	Transistor 2SA934Q
Q312, Q313	5145082000	Transistor 2SC2060Q
R14	5283503100	Var. Res., w/Motor 100kΩ(A) x 2
R135~R137	5183082000	Carbon Res. 1kΩ ¼W 5%
R328	5183074000	Carbon Res. 470Ω ¼W 5%
C135	5260065812	Elec. Cap. 2.2μF 50V (BP)
	5122146000	Connector Plug, 3P

OPERATION SW PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200060600	PCB Assy (V-95RX/V-R1) [All except US, C]
	5200060610	PCB Assy (V-95RX/V-R1) [US, C]
	5200060620	PCB Assy (V-90R/V-R2) [All except US, C]
	5200060630	PCB Assy (V-90R/V-R2) [US, C]
	5210060600	PCB [All except US, C]
	5210063900	PCB [US, C]
U414	5242105100	Resistor Array, 2.2kΩ x 7
U415, U416	5228006900	Diode Array, DA-4P
U417	5228006800	Diode Array, DA-3P
S401	5302100900	Tact Switch
P411	5336103100	Connector Socket, 11P
P412	5336102400	Connector Socket, 4P
P413	5334021900	Connector Socket, 8P
	5225010300	LED, GL-5PR6
	5225010400	LED, GL-5NG10
	5800318402	Plate, Shield

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.
[A]: AUSTRALIA [J]: JAPAN [L]: LIMITED AREA

CONTROL PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5760215800	PCB Assy
	5760215900	PCB
	IC's	
IC1	5760166800	T4-38262
IC2, IC3	5760216300	BA6208
	TRANSISTORS	
Q1	5231758900	2SD400E
Q2~Q10	5230770300	2SC1815Y
Q11	5230012600	2SA1015Y
	DIODES	
D1~D7	5143118000	1S2473HJ
D8	5042290000	1N4002
ZD1	5224524903	Zener HZ7B2
ZD2	5760216400	Zener HZ3C1
ZD3	5143254000	Zener WZ042
	5760216500	X-tal 4194304Hz
	CARBON RESISTORS **All resistors are rated ±5% tolerance and ¼ watt.**	
R1	5183060000	120Ω
R3	5183098000	4.7kΩ
R4, R5	5183068000	270Ω
R6, R7	5183106000	10kΩ
R8, R9	5183114000	22kΩ
R10, R11	5183086000	1.5kΩ
R12, R13	5183106000	10kΩ
R14, R15	5183114000	22kΩ
R16	5183122000	47kΩ
R17	5183114000	22kΩ
R19	5183138000	220kΩ
R20, R21	5183130000	100kΩ
R22~R27	5183122000	47kΩ
R28	5183154000	1MΩ
R29	5183091000	2.4kΩ
	CAPACITORS	
C1~C5	5173010000	Elec. 10μF 16V
C6	5173017000	Elec. 22μF 10V
C7	5173043000	Elec. 100μF 6.3V
C8, C9	5170425800	Mylar 0.01μF 100V
C10	5172992000	Elec. 1μF 50V
C11, C12	5172301000	Ceramic 12pF 50V
C13	5170401800	Mylar 0.001μF 100V
C15	5760216800	Ceramic 0.1μF 25V
	CONNECTORS	
CN1	5122129000	Plug, 5P
CN2	5122133000	Plug, 9P
CN3	5122137000	Plug, 13P
CN4	5122127000	Plug, 3P
CN5	5122128000	Plug, 4P
CN6	5122130000	Plug, 9P
CN7	5122136000	Plug, 12P
CN8	5122128000	Plug, 4P

CAM PCB ASSY (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5760216100	PCB Assy
	5760216200	PCB
	5228700100	Hall IC DN6838

TIMER SW PCB ASSY (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200060100	PCB Assy [All except US, C]
	5200060110	PCB Assy [US, C]
	5210060100	PCB [All except US, C]
	5210063400	PCB [US, C]
	5301203700	Switch, Rotary; 2—3

REVERSE MODE SW PCB ASSY (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200060000	PCB Assy [All except US, C]
	5200060010	PCB Assy [US, C]
	5210060000	PCB [All except US, C]
	5210063300	PCB [US, C]
	5301203700	Switch, Rotary; 2—3

7 seg. LED PCB ASSY (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200060800	PCB Assy (V-95RX/V-R1)
	5200060810	PCB Assy (V-90R/V-R2)
	5210060800	PCB
	5225009300	LED, SL-2172 (V-95RX/V-R1)
	5225009400	LED, SL-2406-20

UP-DOWN SW PCB ASSY (V-95RX/V-R1) (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200059900	PCB Assy [All except US, C]
	5200059910	PCB Assy [US, C]
	5210059900	PCB [All except US, C]
	5210063200	PCB [US, C]
S106, S107	5302101000	Switch, Tact

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.
[A]: AUSTRALIA [J]: JAPAN [L]: LIMITED AREA

SPEED SW PCB ASSY (V-95RX/V-R1) (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200060200	PCB Assy [All except US, C]
	5200060210	PCB Assy [US, C]
	5210060200	PCB [All except US, C]
	5210063500	PCB [US, C]
	5300023900	Switch, Push; 2–2
R318	5183044000	Carbon Res. 27Ω ¼W 5%

BALANCE VR PCB ASSY (V-95RX/V-R1) (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200060300	PCB Assy [All except US, C]
	5200060310	PCB Assy [US, C]
	5210060300	PCB [All except US, C]
	5210063600	PCB [US, C]
R15	5282011202	Var. Res. 200kΩ

OUTPUT VR PCB ASSY (V-95RX/V-R1) (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200060400	PCB Assy [All except US, C]
	5200060410	PCB Assy [US, C]
	5210060400	PCB [All except US, C]
	5210063700	PCB [US, C]
R13	5282407702	Var. Res. 20kΩ(A) x 2

DBX LED PCB ASSY (V-95RX/V-R1) (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200060900	PCB Assy
	5210060900	PCB
	5225008600	LED, LT-9000N

VOLUME IND. LED PCB ASSY (V-95RX/V-R1) (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200061000	PCB Assy
	5210061000	PCB
	5225008500	LED, GL-9NG10

SLIDE VR PCB ASSY (V-90R/V-R2) (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200059300	PCB Assy [All except US, C]
	5200059310	PCB Assy [US, C]
	5210059300	PCB [All except US, C]
	5210062600	PCB [US, C]
R14	5284005400	Slide Var. Res. 100kΩ(A) x 2

POWER SW PCB ASSY (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200060500	PCB Assy [J]
	5200060510	PCB Assy [US]
	5200060520	PCB Assy [C]
	5200060530	PCB Assy [GE, L]
	5200060540	PCB Assy [E, UK, A]
	5210060500	PCB [All except US, C]
	5210063800	PCB [US, C]
	⚠5300024000	Switch, Push [J]
	⚠5300024100	Switch, Push [US, C]
	⚠5300024200	Switch, Push [GE, L, E, UK, A]
	⚠5052905000	Spark Killer 0.1μF + 120Ω/300V [J]
	⚠5052906000	Spark Killer 0.33μF + 120Ω/250V [U]
	⚠5052911000	Spark Killer 0.033μF + 120Ω/250V [C]
	⚠5292002500	Spark Killer 0.01μF + 300Ω [GE, L]
	⚠5267702500	Spark Killer 0.0047μF/250V [E, UK, A]

FUSE PCB ASSY (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200061200	PCB Assy [E, UK]
	5210061200	PCB [E, UK]
	5142087000	Holder, Fuse [E, UK]
F1, F2	5041138000	Fuse, T500mA 250V [E, UK]
F3	5041140000	Fuse, T1A 250V [E, UK]

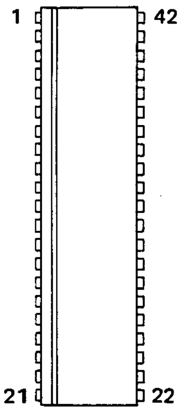
VOLTAGE SELECTOR PCB ASSY (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5200034900	PCB Assy [GE, L]
	5210034900	PCB [GE, L]
	5555062000	Plate, Selector; A [GE, L]

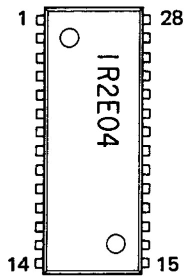
[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.
[A]: AUSTRALIA [J]: JAPAN [L]: LIMITED AREA

SEMICONDUCTOR ELECTRODES

T4-38262
(TOP VIEW)



IR2E04
(TOP VIEW)


1
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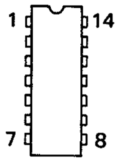
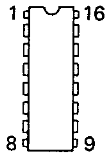
IR2E04
14
15

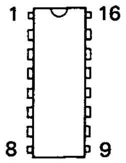
TC4001BP
TC4011BP
TC4013BP
TC4069UBP
TC4071BP
TC5002BP
(TOP VIEW)



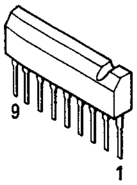
TA7629P
TC4015BP
(TOP VIEW)



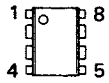
MSM4049RS
(TOP VIEW)



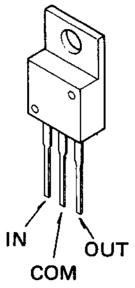
BA6208



NJM4560D
NJM4562D
RC4558P
TL082CP
(TOP VIEW)



NJM78M05A
NJM78M12A



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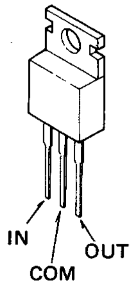
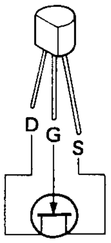
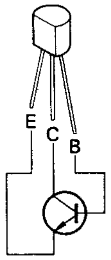


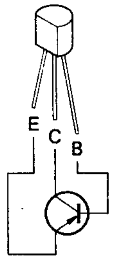
2SK68AL



2SC1815GR
2SC1844F
2SC1845GR
2SC2878GR
KTN5014GR



2SA1015GR



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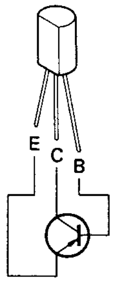
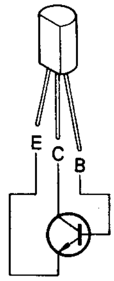
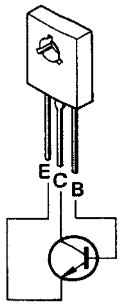


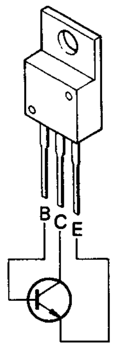
2SC2060
2SD1140



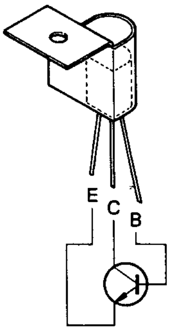
2SD985



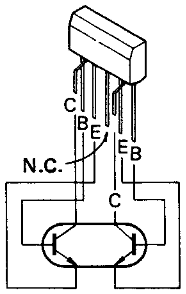
2SD313F



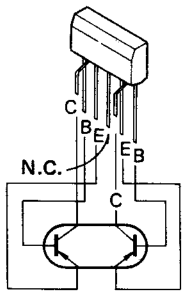
2SD400



μPA74V



μPA75V



V-95RX / V-90R

REVISION

The circuit diagrams, PC board diagrams, and adjustment procedures in this sheet are provided for model V-95RX serial No. 8941 and higher, and model V-90R serial No. 9371 and higher.

Revision information

1. The JOINT PCB and SENSOR PCB-116 of older models are deleted. These PCB circuits are incorporated in the CONTROL PCB-133.
2. The sensor circuit is changed.
3. The position of connectors on the OPERATION SW PCB is changed.
4. Because of the sensor circuit change, the adjusting method of the quick-reverse circuit is changed as in the following descriptions.

QUICK-REVERSE CIRCUIT ADJUSTMENT

1. Set the AUTO REVERSE switch to ⊐ or ⊏⊐ .
2. Turn the semi-fixed resistor R41, 10k ohms (B) fully clockwise when viewed from the foil side of the CONTROL PCB-133.
3. Play a TEAC MTT-501 test tape, then adjust the semi-fixed resistor R40, 200k ohms (B) so that the voltage of U413's pin 1 becomes +3 V. If it is impossible to set to +3 V by adjusting the R40 alone, adjust the R41 also.
4. Connect R432 to R431 in parallel as shown in Fig. 2.
5. While running the MTT-501 tape in the forward play mode, check that when the splicing tape passes in front of tape sensor assembly, the deck switches to the reverse play mode.
6. Disconnect the connection indicated in step 4.
7. Run the MTT-501 tape in the forward play mode. Check that when the splicing tape passes in front of the tape sensor assembly, within 10 second period after the start of the Forward play, the deck does not switch to the reverse play mode.

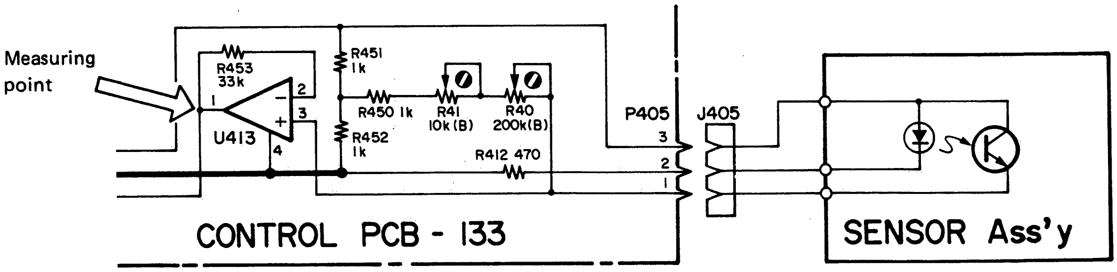

Measuring point
R453 33k
R451 1k
1
2
3
4
U413
R450 1k
R41 10k(B)
R40 200k(B)
R452 1k
R412 470
P405
J405
3
2
1
CONTROL PCB - 133
SENSOR Ass'y

Fig. 1

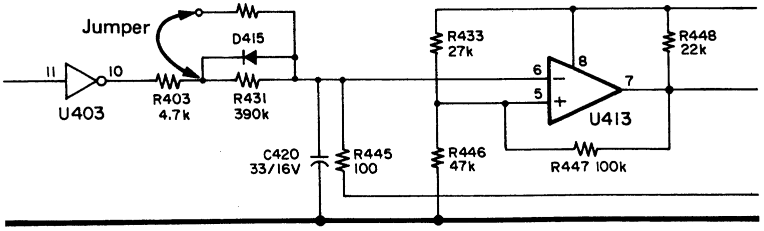
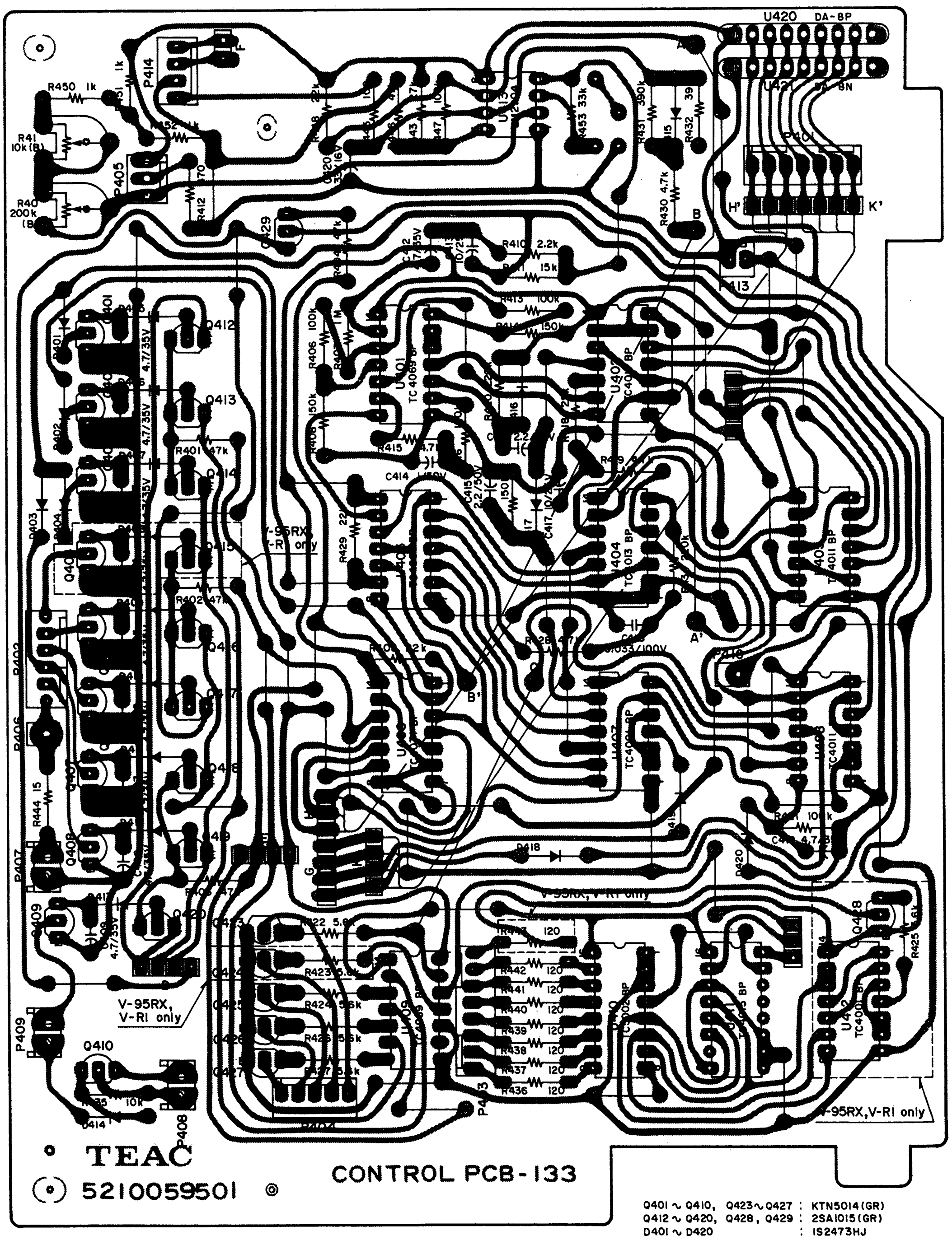

R432 39k
Jumper
D415
11
10
U403
R403 4.7k
R431 390k
C420 33/16V
R445 100
R433 27k
R446 47k
6
5
8
7
U413
R448 22k
R447 100k

Fig. 2

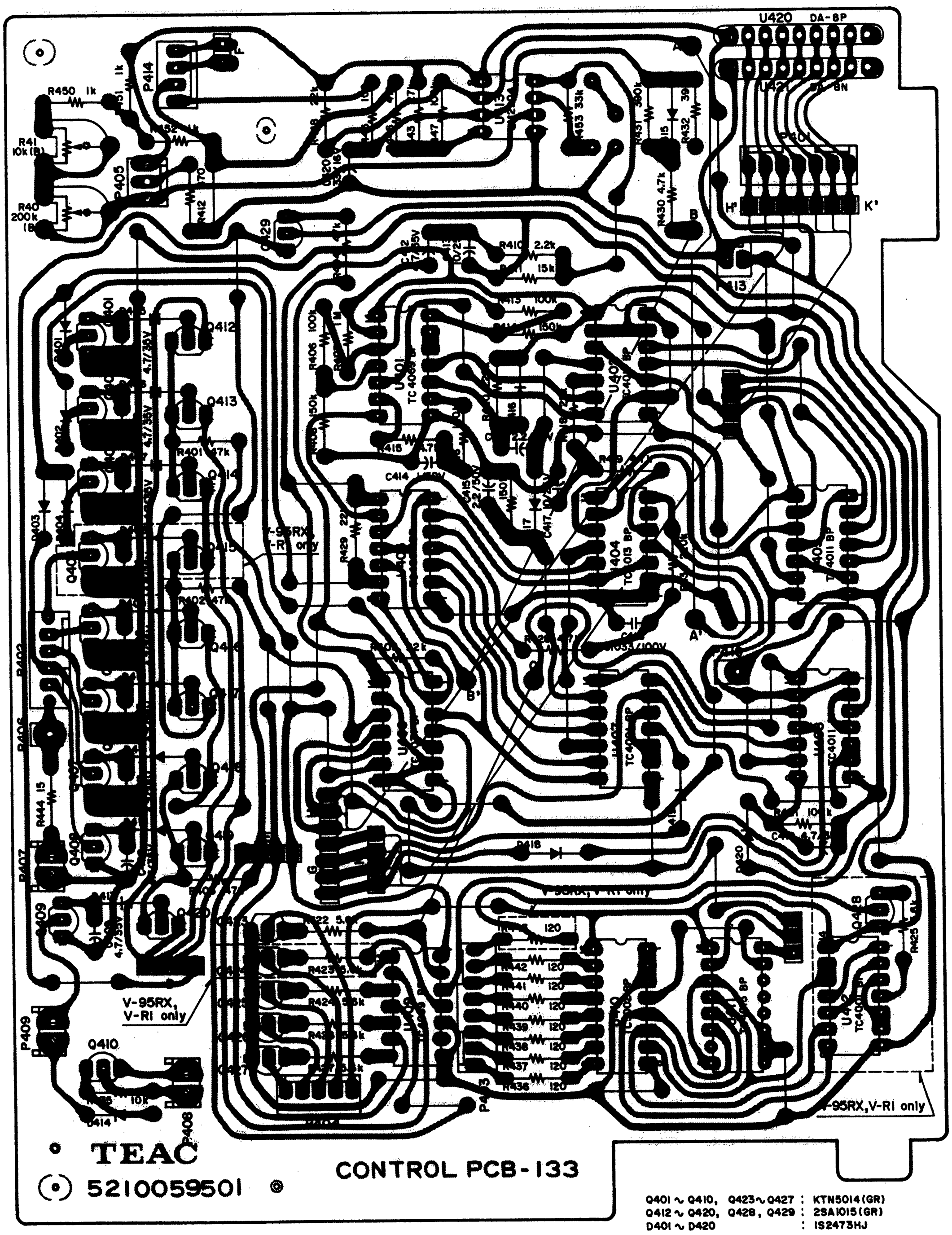
CONTROL PCB-133 ASSY (REVISION)


U420 DA-8P
U421 DA-8N
P401
P402
P403
P404
P405
P406
P407
P408
P409
P413
P414
P416
R450 1k
R451 1k
R452 1k
R41 10k (B)
R40 200k (B)
R410 2.2k
R411 15k
R413 100k
R414 150k
R406 100k
R408 150k
R415 4.7k
R401 47k
R402 47k
R429 22
R430 4.7k
R431 390k
R432 39
R453 33k
R412 470
R444 15
R435 10k
R422 5.6k
R423 5.6k
R424 5.6k
R425 5.6k
R442 120
R441 120
R440 120
R439 120
R438 120
R437 120
R436 120
R443 120
R421 10k
C414 1/50V
C415 2.2/50V
C417 10/16V
C420 33/16V
C421 .0033/100V
4.7/35V
U401 TC4069 BP
U402 TC4011 BP
U403
U404 TC4013 BP
U405 TC4011 BP
U406
U407 TC4011 BP
U408 TC4011
U409 TC4069 BP
U410 TC4002 BP
U411
U412 TC4001 BP
Q401
Q402
Q403
Q404
Q405
Q406
Q407
Q408
Q409
Q410
Q411
Q412
Q413
Q414
Q415
Q416
Q417
Q418
Q419
Q420
Q423
Q424
Q425
Q426
Q427
Q428
Q429
D401
D402
D403
D404
D414
D418
D420
A
A'
B
B'
C
G
H'
K'
V-95RX, V-RI only
V-95RX, V-RI only
V-95RX, V-RI only
V-95RX, V-RI only
TEAC
5210059501
CONTROL PCB-133

Q401 ~ Q410, Q423 ~ Q427 : KTN5014(GR)
Q412 ~ Q420, Q428, Q429 : 2SA1015(GR)
D401 ~ D420 : IS2473HJ

A DOMESTIC, JAPAN, MODEL OF THE V-95RX IS THE V-RI.

CONTROL PCB-133 ASSY (REVISION)


U420 DA-8P
U421
P401
H'
K'
A
B
A'
B'
P413
P414
P405
P402
P406
P407
P408
P409
U401 TC4069
U402
U403 TC4011
U404 TC4015 BP
U405 TC4011 BP
U412
V-95RX, V-RI only
V-95RX, V-RI only
V-95RX, V-RI only
TEAC
5210059501
CONTROL PCB-133

Q401 ~ Q410, Q423 ~ Q427 : KTN5014(GR)
Q412 ~ Q420, Q428, Q429 : 2SA1015(GR)
D401 ~ D420 : 1S2473HJ

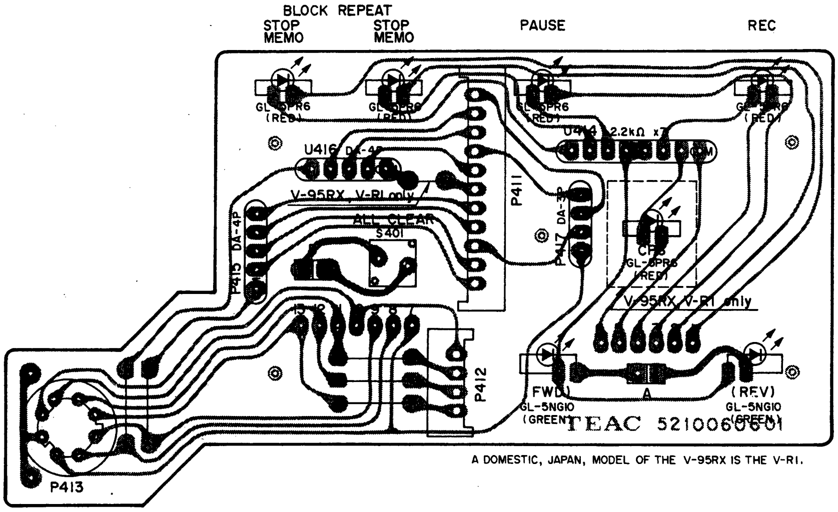
A DOMESTIC, JAPAN, MODEL OF THE V-95RX IS THE V-RI.

REF. NO.	PARTS NO.	DESCRIPTION
	5200059501	PCB Assy (V-95RX/V-R1) [All except US, C]
	5200059511	PCB Assy (V-95RX/V-R1) [US, C]
	5200059521	PCB Assy (V-90R/V-R2) [All except US, C]
	5200059531	PCB Assy (V-90R/V-R2) [US, C]
	5210059501	PCB [All except US, C]
	5210062801	PCB [US, C]
	IC's	
U401	5220019400	TC4069UBP
U402	5220019100	TC4011BP
U403	5220019400	TC4069UBP
U404	5220019200	TC4013BP
U405	5220019100	TC4011BP
U406	5220019500	TC4071BP
U407	5220019000	TC4001BP
U408	5220019100	TC4011BP
U409	5220019400	TC4069UBP
U410	5220013300	TE5002BP
U411	5220019300	TC4015BP
U412	5220019000	TC4001BP (V-95RX/VR1)
U413	5220416500	LM2940
	TRANSISTORS	
Q401~Q403	5230777200	KTN5014GR
Q404	5230777200	KTN5014GR (V-95RX/V-R1)
Q405~Q410	5230777200	KTN5014GR
Q412~Q414	5145150000	2SA1015GR
Q415	5145150000	2SA1015GR (V-95RX/V-R1)
Q416~Q420	5145150000	2SA1015GR
Q423	5230777200	KTN5014GR
Q424	5230777200	KTN5014GR (V-95RX/V-R1)
Q425~Q427	5230777200	KTN5014GR
Q428	5145150000	2SA1015GR (V-95RX/V-R1)
Q429	5145150000	2SA1015GR
	DIODES	
D401~D407	5143118000	1S2473HJ
D408	5143118000	1S2473HJ (V-95RX/V-R1)
D409~D420	5143118000	1S2473HJ
U420	5228008800	Array, DA-8P
U421	5228007900	Array, DA-8N
	CARBON RESISTORS **All resistors are rated ±5% tolerance and ¼ watt.**	
R401~R404	5183122000	47kΩ
R405	5183114000	22kΩ
R406	5183130000	100kΩ
R407	5183154000	1MΩ
R408	5183134000	150kΩ
R410	5183090000	2.2kΩ
R411	5183110000	15kΩ
R412	5183074000	470Ω
R413	5183130000	100kΩ
R414	5183134000	150kΩ
R415	5183098000	4.7kΩ
R416	5183130000	100kΩ
R417	5183134000	150kΩ
R418	5182114000	22kΩ
R419	5183098000	4.7kΩ

REF. NO.	PARTS NO.	DESCRIPTION
R420	5183138000	220kΩ
R421	5183130000	100kΩ
R422	5183100000	5.6kΩ
R423	5183100000	5.6kΩ (V-95RX/V-R1)
R424	5183100000	5.6kΩ
R425	5183100000	5.6kΩ (V-95RX/V-R1)
R426, R427	5183100000	5.6kΩ
R428	5183098000	4.7kΩ
R429	5183114000	22kΩ
R430	5183098000	4.7kΩ
R431	5183144000	390kΩ
R432	5183120000	39kΩ
R433	5183116000	27kΩ
R434	5183138000	220kΩ
R435	5183106000	10kΩ
R436~R442	5183060000	120Ω
R443	5183060000	120Ω (V-95RX/V-R1)
R444	5183038000	15Ω
R445	5183058000	100Ω
R446	5183122000	47kΩ
R447	5183130000	100kΩ
R448	5183114000	22kΩ
R450~R452	5183082000	1kΩ
R453	5183118000	33kΩ
	CAPACITORS	
C401, C402	5173005800	Elec. 4.7μF 35V
C403	5173005800	Elec. 4.7μF 35V (V-95RX/V-R1)
C404~C409	5173005800	Elec. 4.7μF 35V
C412	5173005800	Elec. 4.7μF 35V
C413	5173011800	Elec. 10μF 25V
C414	5172992800	Elec. 1μF 50V
C415	5172996800	Elec. 2.2μF 50V
C416	5172996800	Elec. 2.2μF 50V
C417	5173011800	Elec. 10μF 25V
C418	5170437000	Mylar 0.033μF 100V 5%
C419	5173005800	Elec. 4.7μF 35V
C420	5173027800	Elec. 33μF 16V
	VARIABLE RESISTORS	
R40	5280004302	Semi-fixed 200kΩ (B)
R41	5280003502	Semi-fixed 10kΩ (B)
	CONNECTORS	
P401	5122131000	Plug, 7P
P402	5122130000	Plug, 6P
P403	5122132000	Plug, 8P
P404	5122129000	Plug, 5P
P405	5122127000	Plug, 3P
P406	5336104100	Socket, WP22-1W
P407~P409	5336104200	Socket, MWP2P-1B
P410	5336104100	Socket, WP22-1W
P413	5122126000	Plug, 2P
P414	5122128000	Plug, 4P

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.
[A]: AUSTRALIA [J]: JAPAN [L]: LIMITED AREA

OPERATION SW PCB ASSY (REVISION)


BLOCK REPEAT
STOP MEMO
STOP MEMO
PAUSE
REC
GL-5PR6 (RED)
GL-5PR6 (RED)
GL-5PR6 (RED)
GL-5PR6 (RED)
U414 2.2kΩ x7
COM
U416 DA-4P
V-95RX, V-R1 only
ALL CLEAR
S401
P411
P415 DA-4P
P417 DA-3P
CP5
GL-5PR6 (RED)
V-95RX, V-R1 only
13 12 11 10 9 8 7
P412
FWD
GL-5NG10 (GREEN)
A
(REV)
GL-5NG10 (GREEN)
TEAC 5210060601
P413

A DOMESTIC, JAPAN, MODEL OF THE V-95RX IS THE V-R1.

REF. NO.	PARTS NO.	DESCRIPTION
	5200060601	PCB Assy (V-95RX/V-R1) [All except US, C]
	5200060611	PCB Assy (V-95RX/V-R1) [US, C]
	5200060621	PCB Assy (V-90R/V-R2) [All except US, C]
	5200060631	PCB Assy (V-90R/V-R2) [US, C]
	5210060601	PCB [All except US, C]
	5210063901	PCB [US, C]
U414	5242105100	Resistor Array, 2.2kΩ x 7
U415, U416	5228006900	Diode Array, DA-4P
U417	5228006800	Diode Array, DA-3P
S401	5302100900	Tact Switch
P411	5336103100	Connector Socket, 11P
P412	5336102400	Connector Socket, 4P
P413	5334021900	Connector Socket, 8P
	5225010300	LED, GL-5PR6
	5225010400	LED, GL-5NG10
	5800318402	Plate, Shield

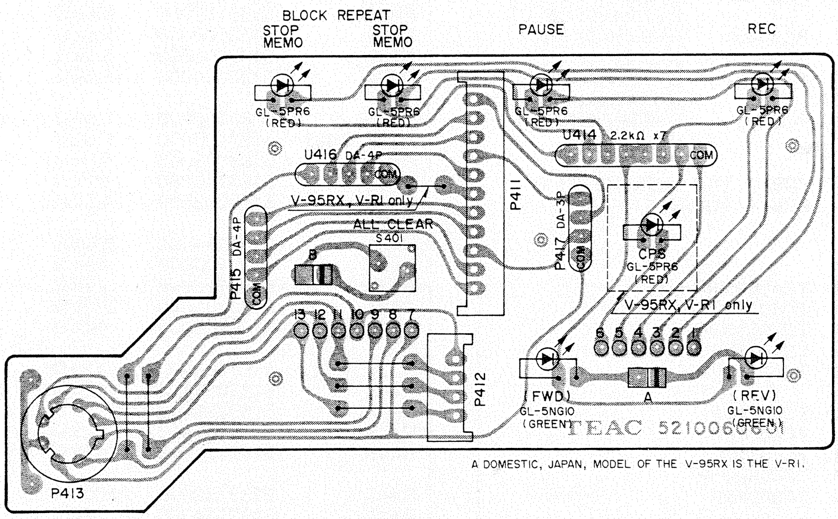
[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.
[A]: AUSTRALIA [J]: JAPAN [L]: LIMITED AREA

TEAC CORPORATION 3-7-3 NAKA-CHO MUSASHINO TOKYO PHONE (0422) 53-1111

TEAC CORPORATION OF AMERICA 7733 TELEGRAPH ROAD MONTEBELLO CALIFORNIA 90640 PHONE (213) 726-0303

TEAC AUSTRALIA PTY., LTD. 115 WHITEMAN STREET SOUTH MELBOURNE VICTORIA 3205 PHONE 699-6000

OPERATION SW PCB ASSY (REVISION)


BLOCK REPEAT
STOP MEMO
STOP MEMO
PAUSE
REC
GL-5PR6 (RED)
GL-5PR6 (RED)
GL-5PR6 (RED)
GL-5PR6 (RED)
U414 2.2kΩ x7
COM
U416 DA-4P
COM
V-95RX, V-RI only
ALL CLEAR
S401
B
P411
P417 DA-3P
COM
CPS
GL-5PR6
(RED)
P415 DA-4P
COM
V-95RX, V-RI only
13 12 11 10 9 8 7
6 5 4 3 2 1
P412
(FWD)
GL-5NG10
(GREEN)
A
(REV)
GL-5NG10
(GREEN)
TEAC 5210060601
P413

A DOMESTIC, JAPAN, MODEL OF THE V-95RX IS THE V-RI.

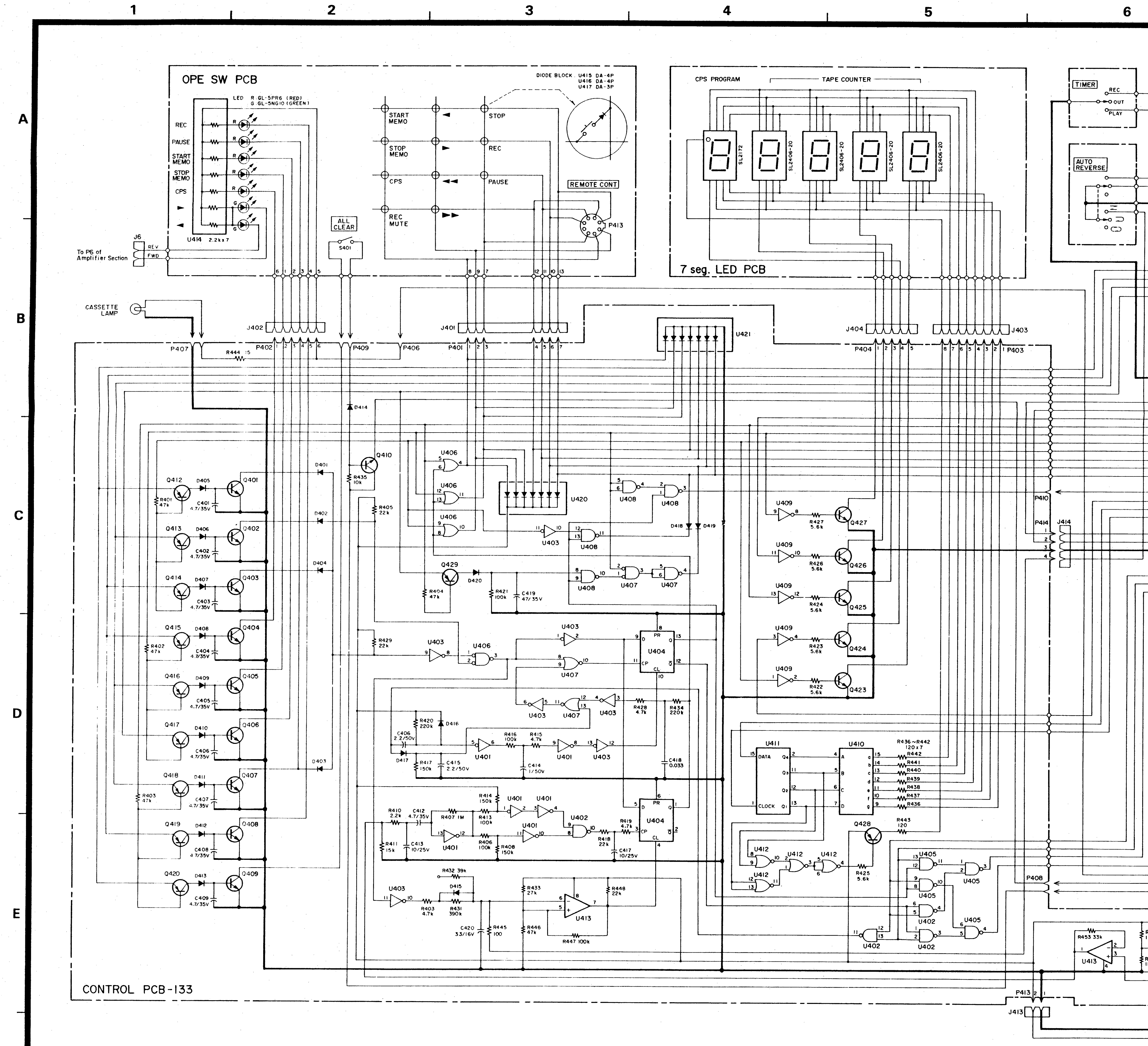
REF. NO.	PARTS NO.	DESCRIPTION
	5200060601	PCB Assy (V-95RX/V-R1) [All except US, C]
	5200060611	PCB Assy (V-95RX/V-R1) [US, C]
	5200060621	PCB Assy (V-90R/V-R2) [All except US, C]
	5200060631	PCB Assy (V-90R/V-R2) [US, C]
	5210060601	PCB [All except US, C]
	5210063901	PCB [US, C]
U414	5242105100	Resistor Array, 2.2kΩ x 7
U415, U416	5228006900	Diode Array, DA-4P
U417	5228006800	Diode Array, DA-3P
S401	5302100900	Tact Switch
P411	5336103100	Connector Socket, 11P
P412	5336102400	Connector Socket, 4P
P413	5334021900	Connector Socket, 8P
	5225010300	LED, GL-5PR6
	5225010400	LED, GL-5NG10
	5800318402	Plate, Shield

[US]: U.S.A. [C]: CANADA [GE]: GENERAL EXPORT [E]: EUROPE [UK]: U.K.
[A]: AUSTRALIA [J]: JAPAN [L]: LIMITED AREA

TEAC CORPORATION 3-7-3 NAKA-CHO MUSASHINO TOKYO PHONE (0422) 53-1111

TEAC CORPORATION OF AMERICA 7733 TELEGRAPH ROAD MONTEBELLO CALIFORNIA 90640 PHONE (213) 726-0303
TEAC AUSTRALIA PTY., LTD. 115 WHITEMAN STREET SOUTH MELBOURNE VICTORIA 3205 PHONE 699-6000

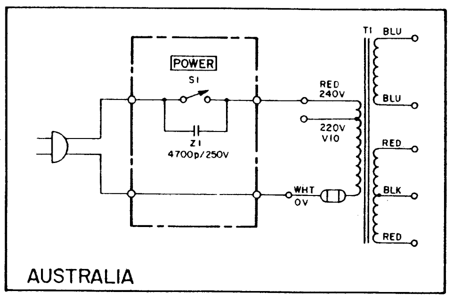
TEAC SCHEMATIC DIAGRAM (CONTROL) V-95RX/V-R1


1
2
3
4
5
6
A
B
C
D
E
OPE SW PCB
LED R:GL-5PR6 (RED) G:GL-5NG10 (GREEN)
REC
PAUSE
START MEMO
STOP MEMO
CPS
U414 2.2k×7
J6
REV
FWD
To P6 of Amplifier Section
ALL CLEAR
S401
DIODE BLOCK U415 DA-4P U416 DA-4P U417 DA-3P
START MEMO
STOP MEMO
CPS
REC MUTE
STOP
REC
PAUSE
REMOTE CONT
P413
CPS PROGRAM
TAPE COUNTER
SL2172
SL2406-20
7 seg. LED PCB
TIMER
REC
OUT
PLAY
AUTO REVERSE
CASSETTE LAMP
J402
J401
J404
J403
P407
P402
P409
P406
P401
P404
P403
R444 15
U421
D414
Q410
R435 10k
R405 22k
U406
U420
U408
D418
D419
U403
U409
R427 5.6k
Q427
R426 5.6k
Q426
R424 5.6k
Q425
R423 5.6k
Q424
R422 5.6k
Q423
P410
P414
J414
Q401
Q402
Q403
Q404
Q405
Q406
Q407
Q408
Q409
Q412
Q413
Q414
Q415
Q416
Q417
Q418
Q419
Q420
D401
D402
D403
D404
D405
D406
D407
D408
D409
D410
D411
D412
D413
R401 47k
R402 47k
R403 47k
C401 4.7/35V
C402 4.7/35V
C403 4.7/35V
C404 4.7/35V
C405 4.7/35V
C406 4.7/35V
C407 4.7/35V
C408 4.7/35V
C409 4.7/35V
Q429
D420
R404 47k
R421 100k
C419 47/35V
U407
R429 22k
U404
R428 4.7k
R434 220k
R420 220k
D416
C406 2.2/50V
D417
R417 150k
C415 2.2/50V
R416 100k
R415 4.7k
U401
C414 1/50V
C418 0.033
U411
DATA
CLOCK
U410
R436~R442 120×7
R442
R441
R440
R439
R438
R437
R436
R410 2.2k
C412 4.7/35V
R407 1M
R414 150k
R413 100k
R406 100k
R408 150k
R411 15k
C413 10/25V
U402
R419 4.7k
R418 22k
C417 10/25V
Q428
R443 120
U412
R425 5.6k
U405
P408
R432 39k
D415
R433 27k
R448 22k
R403 4.7k
R431 390k
C420 33/16V
R445 100
R446 47k
R447 100k
U413
R453 33k
CONTROL PCB-133
P413
J413

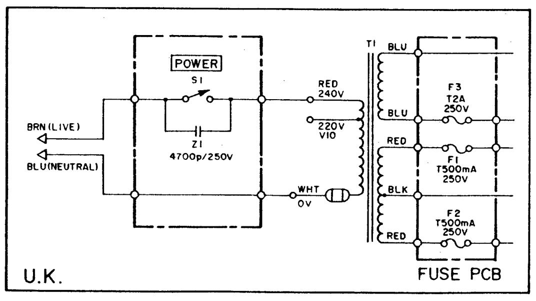
CONTROL PCB-133			
U401	TC4069UBP	Q401～Q410	KTN5014(GR)
U402	TC4011BP	Q411	(Not used)
U403	TC4069UBP	Q412～Q420	2SA1015(GR)
U404	TC4013BP	Q421, Q422	(Not used)
U405	TC4011BP	Q423～Q427	KTN5014(GR)
		Q428, Q429	2SA1015(GR)
U406	TC4071BP		
U407	TC4001BP	D401～D420	IS2473HJ
U408	TC4011BP		
U409	TC4069BP		
U410	TC5002BP		
U411	TC4015BP	U420	DA-8P
U412	TC4001BP	U421	DA-8N
U413	LM2904		

R/P PCB(1/2)			
U301	NJM78M12A	D301	LBA-01
U302	NJM79M12A	D302	MBK-02
U303	NJM78M05A	D303, D304	SM-1A-02
		D305	EQA01-13A
Q301	2SD985	D306	SM-1A-02
Q314	2SD985	D311	SM-1A-02
Q315	2SD313(F)	D312	GZA9.1L
Q316	KTN5014(GR)	D106～D108	IS2473HJ
Q118	2SA1015(GR)	D109	DS135D

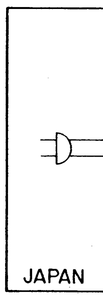
CONTROL PCB	
IC1	MPU T4-38262
IC2, IC3	BA6208
Q1	2SD400(E)
Q2～Q10	2SC1815(Y)
Q11	2SA1015(Y)
D1～D7	IS2473HJ
D8	IN4002
ZD1	HZ7B2
ZD2	HZ3C1
ZD3	WZ044


POWER
S1
Z1
4700p/250V
T1
BLU
RED 240V
220V
V10
BLU
RED
BLK
WHT
0V
RED

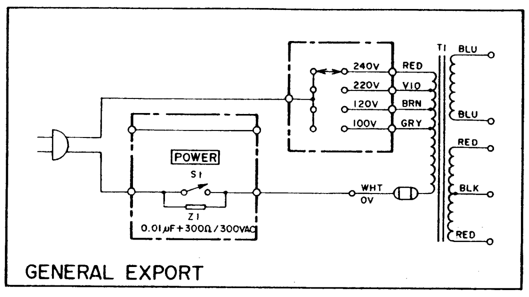
AUSTRALIA


POWER
S1
Z1
4700p/250V
BRN(LIVE)
BLU(NEUTRAL)
T1
BLU
RED 240V
220V
V10
WHT
0V
BLU
RED
BLK
RED
F3 T2A 250V
F1 T500mA 250V
F2 T500mA 250V

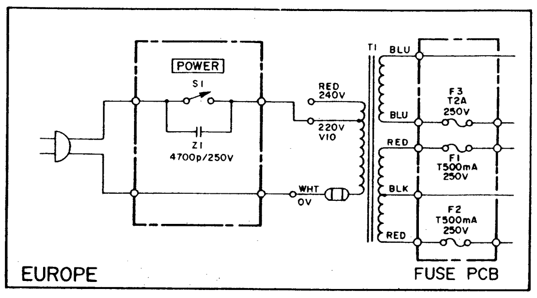
U.K. FUSE PCB



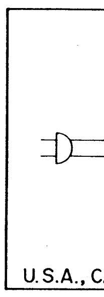
JAPAN


240V
220V
120V
100V
RED
V10
BRN
GRY
T1
BLU
BLU
RED
BLK
RED
POWER
S1
Z1
0.01μF+300Ω/300VAC
WHT
0V

GENERAL EXPORT


POWER
S1
Z1
4700p/250V
T1
BLU
RED 240V
220V
V10
WHT
0V
BLU
RED
BLK
RED
F3 T2A 250V
F1 T500mA 250V
F2 T500mA 250V

EUROPE FUSE PCB



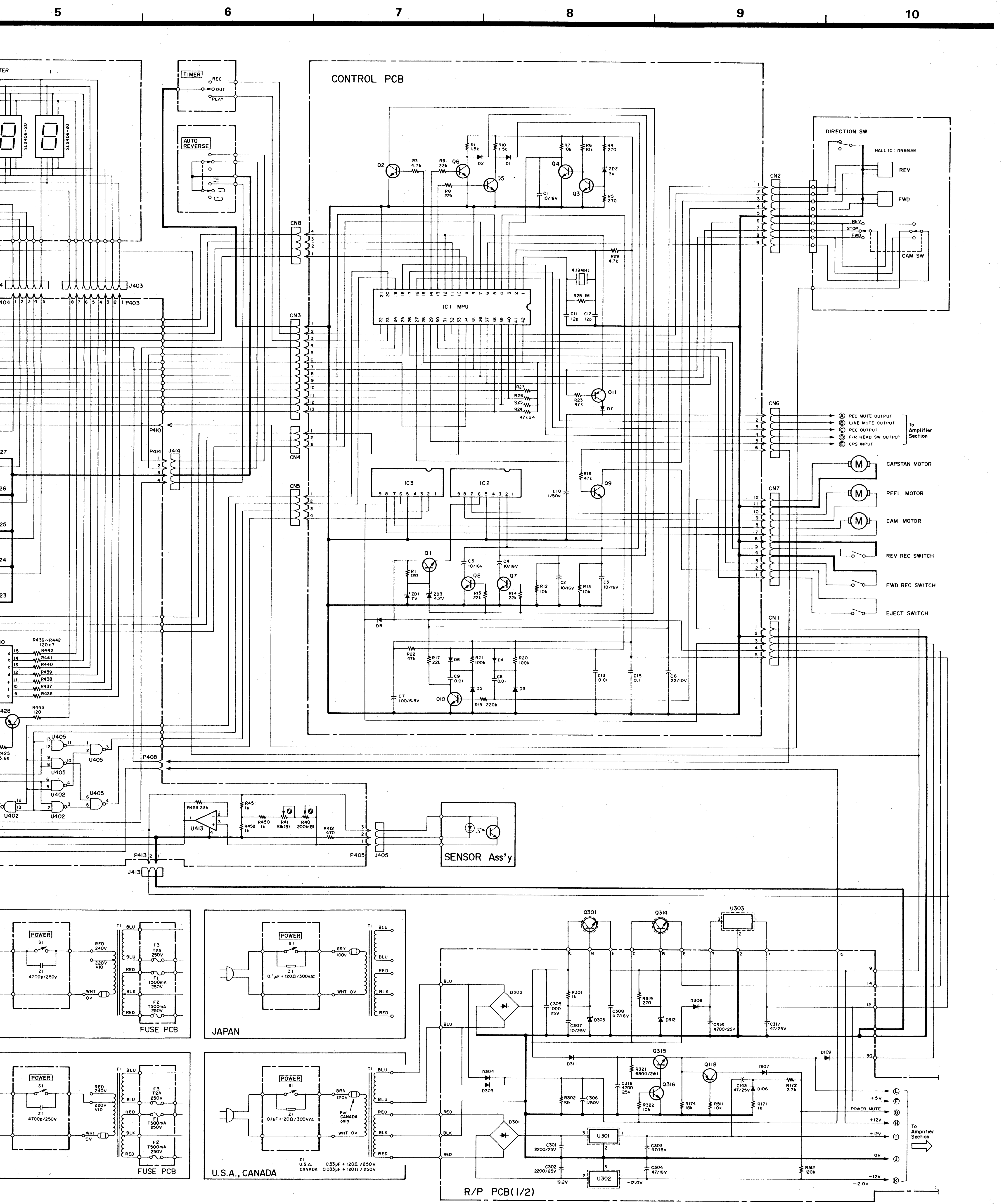
U.S.A., C

F

G

H

NOTES:
1. A domestic, Japan, model of the V-95RX is the V-R1.
2. Ser. No. 8941 and after.

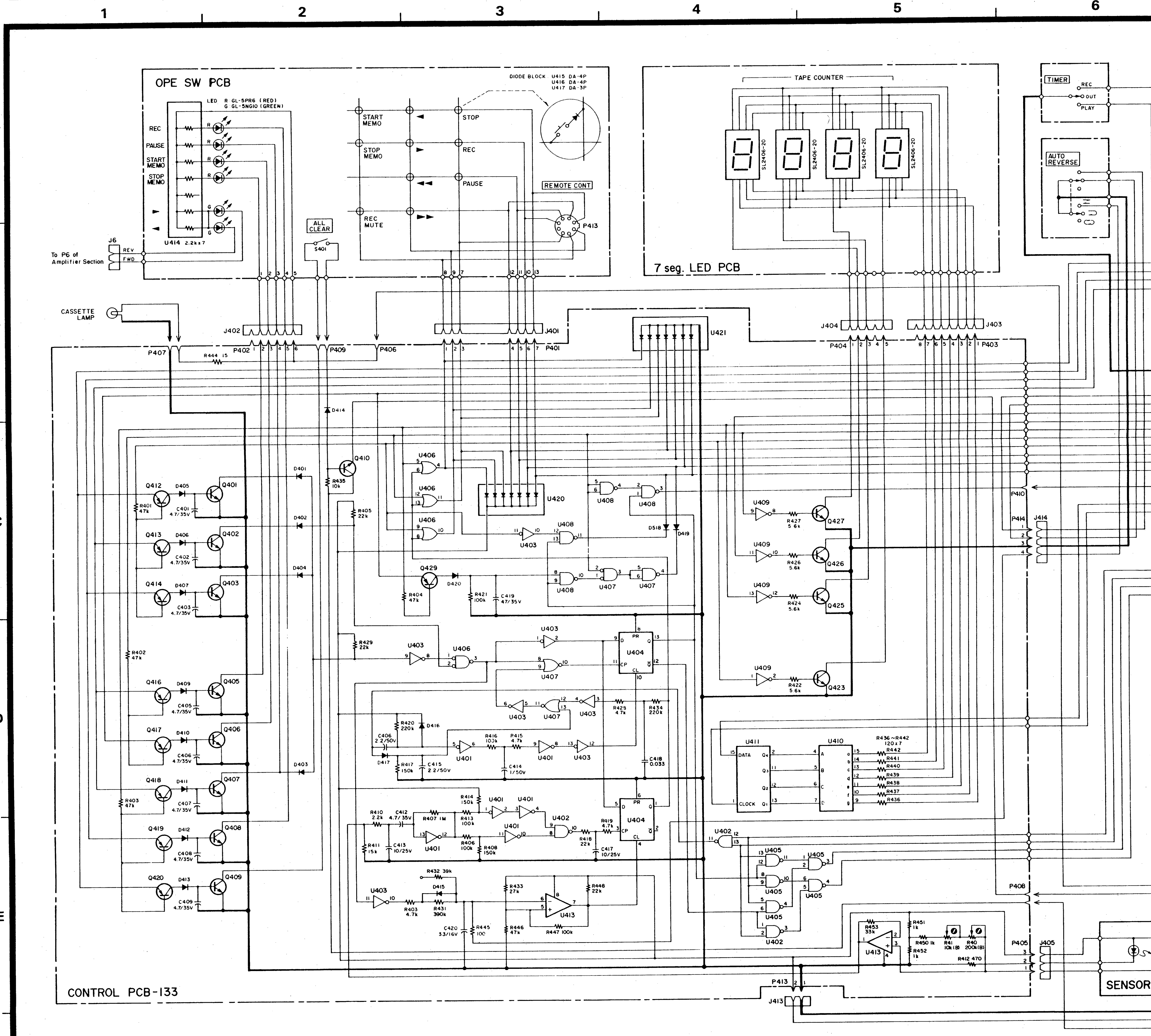


5
6
7
8
9
10
TIMER
REC
OUT
PLAY
AUTO REVERSE
SL2406-20
CONTROL PCB
IC1 MPU
4.19MHz
IC3
IC2
CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
J403
P403
P410
P414
J414
P408
P405
J405
P413
J413
DIRECTION SW
HALL IC DN6838
REV
FWD
STOP
CAM SW
Ⓐ REC MUTE OUTPUT
Ⓑ LINE MUTE OUTPUT
Ⓒ REC OUTPUT
Ⓓ F/R HEAD SW OUTPUT
Ⓔ CPS INPUT
To Amplifier Section
CAPSTAN MOTOR
REEL MOTOR
CAM MOTOR
REV REC SWITCH
FWD REC SWITCH
EJECT SWITCH
U405
U402
U413
SENSOR Ass'y
POWER
FUSE PCB
JAPAN
U.S.A., CANADA
For CANADA only
R/P PCB(1/2)
U301
U302
U303
Q301
Q314
Q315
Q316
Q118
D301
D302
+5V Ⓛ
POWER MUTE Ⓖ
+12V Ⓗ
+12V Ⓘ
0V Ⓙ
-12V Ⓚ
To Amplifier Section

V-95RX / V-R1

Auto-Reverse Stereo Cassette Deck

TEAC SCHEMATIC DIAGRAM (CONTROL) V-90R / V-R2


1
2
3
4
5
6
A
B
C
D
E
OPE SW PCB
LED R GL-5PR6 (RED)
G GL-5NG10 (GREEN)
REC
PAUSE
START MEMO
STOP MEMO
U414 2.2k×7
J6
REV
FWD
To P6 of Amplifier Section
ALL CLEAR
S401
DIODE BLOCK U415 DA-4P
U416 DA-4P
U417 DA-3P
START MEMO
STOP MEMO
REC MUTE
STOP
REC
PAUSE
REMOTE CONT
P413
TAPE COUNTER
SL2406-20
7 seg. LED PCB
TIMER
REC
OUT
PLAY
AUTO REVERSE
CASSETTE LAMP
J402
P402
P407
R444 15
P409
P406
J401
P401
U421
J404
P404
J403
P403
D414
Q410
R435 10k
D401
D402
D403
D404
Q412
Q413
Q414
Q416
Q417
Q418
Q419
Q420
Q401
Q402
Q403
Q405
Q406
Q407
Q408
Q409
R401 47k
R402 47k
R403 47k
C401 4.7/35V
C402 4.7/35V
C403 4.7/35V
C405 4.7/35V
C406 4.7/35V
C407 4.7/35V
C408 4.7/35V
C409 4.7/35V
R405 22k
U406
U420
U408
U403
D518
D419
Q429
D420
R404 47k
R421 100k
C419 47/35V
U407
R429 22k
U404
R429 4.7k
R434 220k
R420 220k
D416
C406 2.2/50V
D417
R417 150k
C415 2.2/50V
R416 100k
R415 4.7k
U401
C414 1/50V
C418 0.033
R414 150k
R410 2.2k
C412 4.7/35V
R407 1M
R413 100k
R411 15k
C413 10/25V
R406 100k
R408 150k
U402
R419 4.7k
R418 22k
C417 10/25V
R432 39k
D415
R433 27k
R448 22k
R403 4.7k
R431 390k
C420 33/16V
R445 100
R446 47k
R447 100k
U413
U409
Q427
Q426
Q425
Q423
R427 5.6k
R426 5.6k
R424 5.6k
R422 5.6k
P410
P414
J414
U411
DATA
CLOCK
U410
R436~R442 120×7
R442
R441
R440
R439
R438
R437
R436
U405
P408
R451 1k
R453 33k
R450 1k
R41 10k(B)
R40 200k(B)
R452 1k
R412 470
P405
J405
SENSOR
P413
J413
CONTROL PCB-133

CONTROL PCB-133

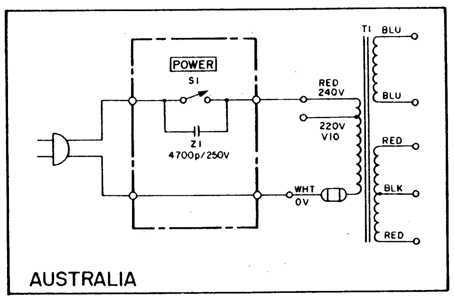
U401		Q401 ~ Q403	KTN5014(GR)	U420	DA-8P
U402	TC4011BP	Q414	(Not used)	U421	DA-8N
U403		Q415 ~ Q410	KTN5014(GR)		
U404	TC4013BP	Q411, Q422	(Not used)		
U405	TC4011BP	Q412 ~ Q420	2SA1015(CR) 2SA1015(GR)		
U406	TC4071BP	Q421, Q422	(Not used)		
U407	TC4001BP	Q423	KTN5014(GR)		
U408	TC4011BP	Q424	(Not used)		
U409	TC4069BP	Q425 ~ Q427	KTN5014(GR)		
U410	TC5002BP	Q428	(Not used)		
U411	TC4015BP	Q429	2SA1015(GR)		
U413	LM2904				
		D401 ~ D407	IS2473HJ		
		D408	(Not used)		
		D409 ~ D420	IS2473HJ		

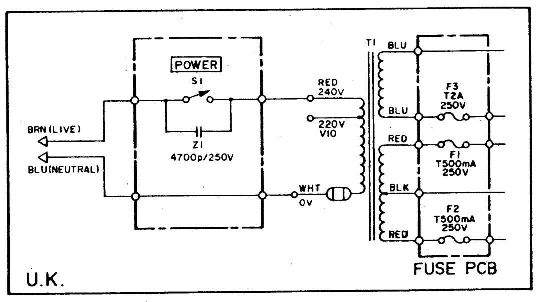
R/P PCB(1/2)

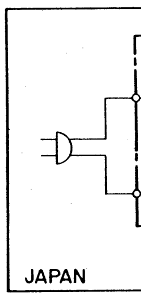
U301	NJM78M12A	D301	LBA-01
U302	NJM79M12A	D302	MBK-02
U303	NJM78M05A	D303, D304	SM-1A-02
		D305	EQA01-13A
Q301	2SD985	D306	SM-1A-02
Q314	2SD985	D311	SM-1A-02
Q315	2SD313(F)	D312	GZA9.1L
Q316	KTN5014(GR)	D106 ~ D108	IS2473HJ
Q118	2SA1015 (GR)	D109	DS-135D

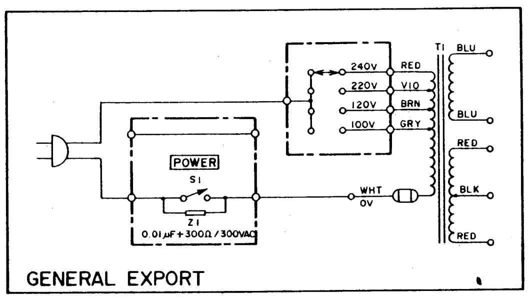
CONTROL PCB

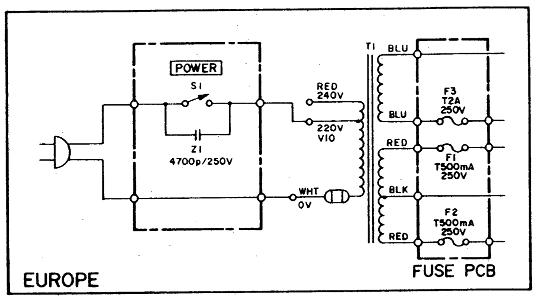
IC1	MPU T4-38262
IC2, IC3	BA6208
Q1	2SD400(E)
Q2 ~ Q10	2SC1815(Y)
Q11	2SA1015(Y)
D1 ~ D7	IS2473HJ
D8	IN4002
ZD1	HZ7B2
ZD2	HZ3C1
ZD3	WZ044

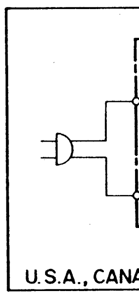

POWER
S1
Z1
4700p/250V
RED 240V
220V V10
WHT 0V
T1
BLU
BLU
RED
BLK
RED
AUSTRALIA


POWER
S1
Z1
4700p/250V
BRN (LIVE)
BLU (NEUTRAL)
RED 240V
220V V10
WHT 0V
T1
BLU
BLU
RED
BLK
RED
F3 T2A 250V
F1 T500mA 250V
F2 T500mA 250V
U.K.
FUSE PCB




240V
220V
120V
100V
RED
V10
BRN
GRY
T1
BLU
BLU
RED
BLK
RED
POWER
S1
Z1
0.01µF+300Ω/300VAC
WHT 0V
GENERAL EXPORT

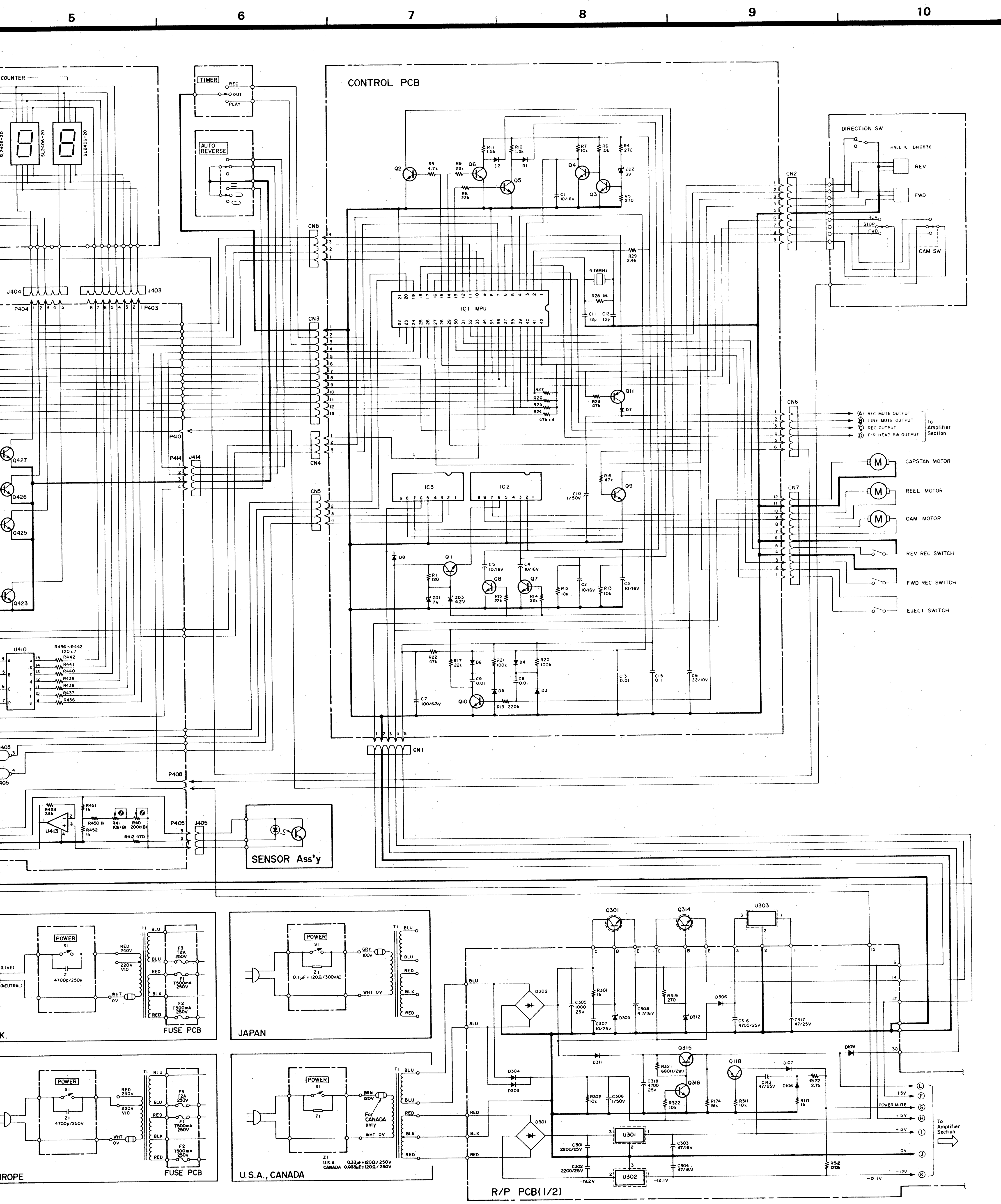

POWER
S1
Z1
4700p/250V
RED 240V
220V V10
WHT 0V
T1
BLU
BLU
RED
BLK
RED
F3 T2A 250V
F1 T500mA 250V
F2 T500mA 250V
EUROPE
FUSE PCB


U.S.A., CANA

F
G
H

NOTES:

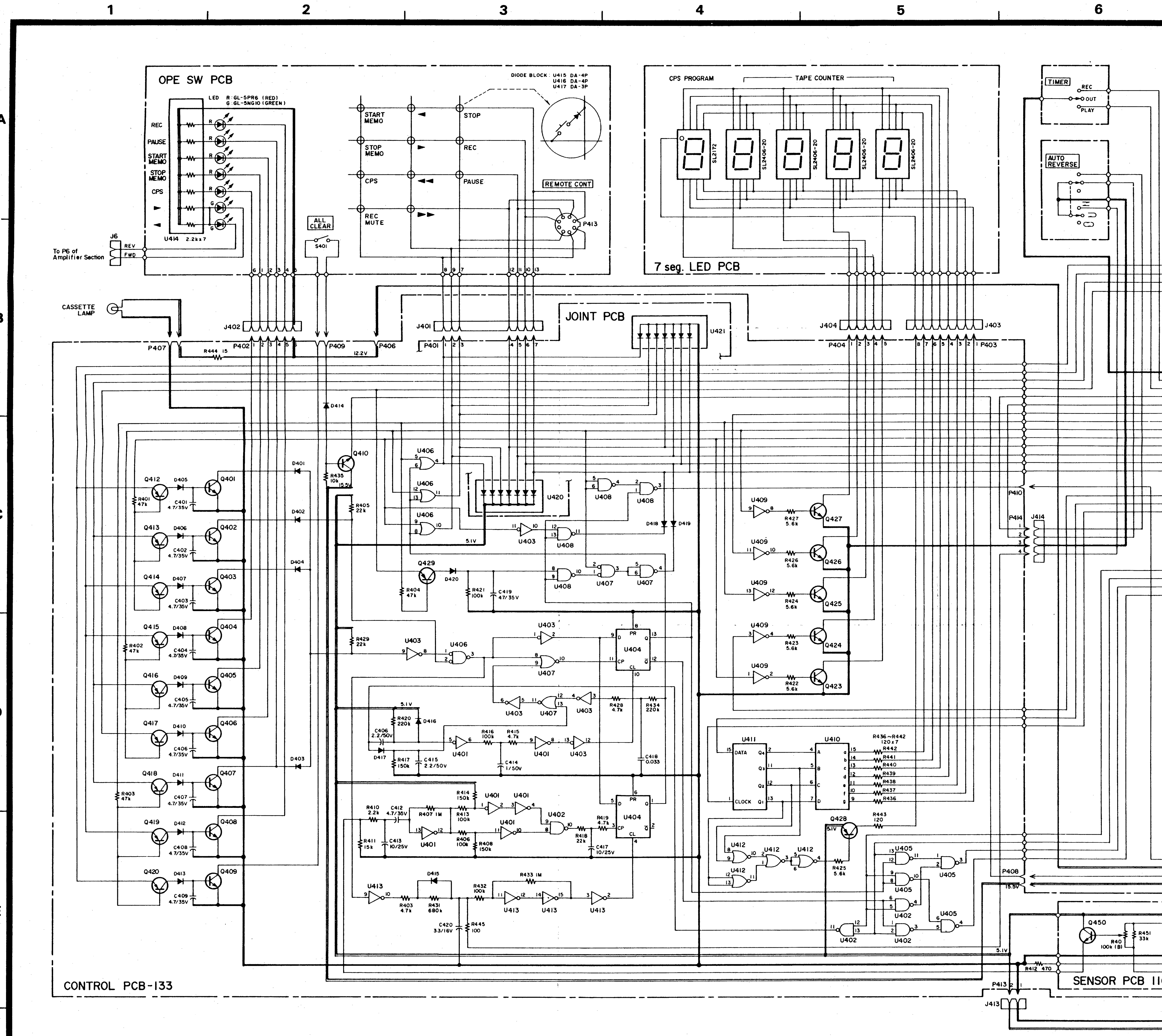
1. A domestic, Japan, model of the V-90R is the V-R2.
2. Ser. No. 9371 and after.


5
6
7
8
9
10
COUNTER
SL2406-20
TIMER
REC
OUT
PLAY
AUTO REVERSE
CONTROL PCB
DIRECTION SW
HALL IC DN6838
REV
FWD
STOP
F.A.D.
CAM SW
CN2
CN8
CN3
CN4
CN5
CN6
CN7
CN1
IC1 MPU
IC2
IC3
4.19MHz
R28 1M
C11 12p
C12 12p
R29 2.4k
Q2
Q6
Q5
Q4
Q3
R3 4.7k
R9 22k
R8 22k
R11 1.5k
R10 1.5k
D2
D1
R7 10k
R6 10k
R4 270
ZD2 3V
R5 270
C1 10/16V
Q11
R23 47k
D7
R27
R26
R25
R24
47k x 4
R16 47k
Q9
C10 1/50V
Ⓐ REC MUTE OUTPUT
Ⓑ LINE MUTE OUTPUT
Ⓒ REC OUTPUT
Ⓓ F/R HEAD SW OUTPUT
To Amplifier Section
CAPSTAN MOTOR
REEL MOTOR
CAM MOTOR
REV REC SWITCH
FWD REC SWITCH
EJECT SWITCH
D8
Q1
R1 120
ZD1 7V
ZD3 4.2V
C5 10/16V
C4 10/16V
Q8
Q7
R15 22k
R14 22k
C9 0.01
R12 10k
C2 10/16V
R13 10k
C3 10/16V
R22 47k
R17 22k
D6
R21 100k
D4
R20 100k
C8 0.01
D5
D3
C7 100/6.3V
Q10
R19 220k
C13 0.01
C15 0.1
C6 22/10V
J404
J403
P404
P403
P410
P414
J414
Q427
Q426
Q425
Q423
U410
R436~R442 120 x 7
R442
R441
R440
R439
R438
R437
R436
P405
P408
J405
R453 33k
R451 1k
R450 1k
R41 10k(B)
R40 200k(B)
R452 1k
R412 470
U413
SENSOR Ass'y
POWER
S1
Z1 4700p/250V
RED 240V
220V V10
WHT 0V
T1
BLU
RED
BLK
F3 T2A 250V
F1 T500mA 250V
F2 T500mA 250V
FUSE PCB
(LIVE)
(NEUTRAL)
K.
UROPE
GRY 100V
0.1µF+120Ω/300VAC
JAPAN
BRN 120V
For CANADA only
U.S.A. 0.33µF+120Ω/250V
CANADA 0.033µF+120Ω/250V
U.S.A., CANADA
Q301
Q314
U303
D302
C305 1000 25V
R301 1k
C307 10/25V
D305
C308 4.7/16V
R319 270
D312
D306
C316 4700/25V
C317 47/25V
D311
Q315
R321 680(1/2W)
C318 4700 25V
Q316
R322 10k
Q118
D107
D106
C143 47/25V
R172 2.7k
R171 1k
R174 18k
R511 10k
D109
D304
D303
R302 10k
C306 1/50V
D301
U301
C301 2200/25V
C302 2200/25V
C303 47/16V
C304 47/16V
U302
R512 120k
-19.2V
-12.1V
+5V
POWER MUTE
+12V
0V
-12V
Ⓛ
Ⓕ
Ⓖ
Ⓗ
Ⓘ
Ⓙ
Ⓚ
To Amplifier Section
R/P PCB(1/2)

V-90R / V-R2

Auto-Reverse Stereo Cassette Deck

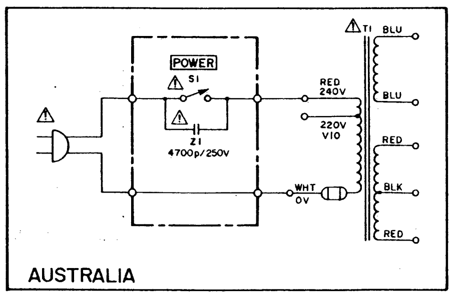
TEAC SCHEMATIC DIAGRAM (CONTROL) V-95RX

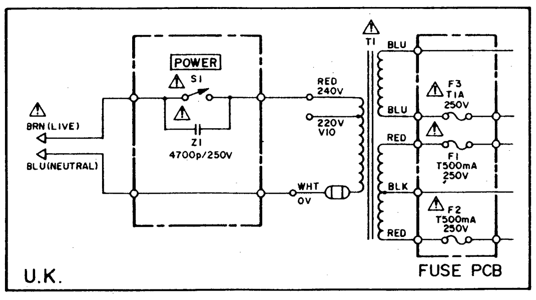

1
2
3
4
5
6
OPE SW PCB
LED R:GL-5PR6 (RED) G:GL-5NG10 (GREEN)
REC
PAUSE
START MEMO
STOP MEMO
CPS
U414 2.2k x7
J6
REV
FWD
To P6 of Amplifier Section
ALL CLEAR
S401
DIODE BLOCK: U415 DA-4P U416 DA-4P U417 DA-3P
START MEMO
STOP
STOP MEMO
REC
CPS
PAUSE
REC MUTE
REMOTE CONT
P413
CPS PROGRAM
TAPE COUNTER
SL2172
SL2406-20
7 seg. LED PCB
TIMER
REC
OUT
PLAY
AUTO REVERSE
CASSETTE LAMP
JOINT PCB
J402
J401
J404
J403
P407
P402
P409
P406
P401
P404
P403
U421
U420
CONTROL PCB-133
SENSOR PCB 11

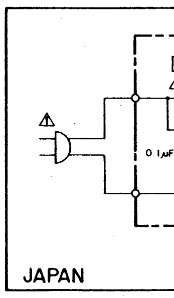
CONTROL PCB-133			
U401	TC4069UBP	Q401～Q410	KTN5014(GR)
U402	TC4011BP	Q411	(Not used)
U403	TC4069UBP	Q412～Q420	2SA1015(GR)
U404	TC4013BP	Q421, Q422	(Not used)
U405	TC4011BP	Q423～Q427	KTN5014(GR)
		Q428, Q429	2SA1015(GR)
U406	TC4071BP		
U407	TC4001BP	D401～D420	1S2473HJ
U408	TC4011BP		
U409	TC4069BP	Q450	KTN5014(GR)
U410	TC5002BP		
U411	TC4015BP	U420	DA-8P (or D421～D427 1S2473HJ x7)
U412	TC4001BP	U421	DA-8N (or D428～D434 1S2473HJ x7)
U413	MSM4049		

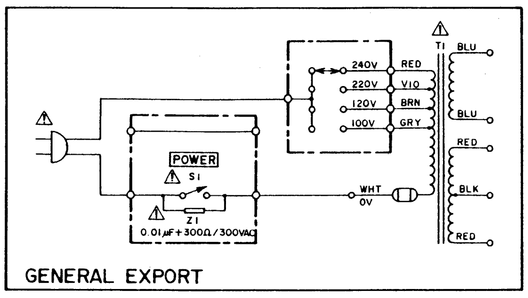
CONTROL PCB	
IC1	MPU T4-38262
IC2, IC3	BA6208
Q1	2SD400(E)
Q2～Q10	2SC1815(Y)
Q11	2SA1015(Y)
D1～D7	1S2473HJ
D8	1N4002
ZD1	HZ7B2
ZD2	HZ3C1
ZD3	WZ046

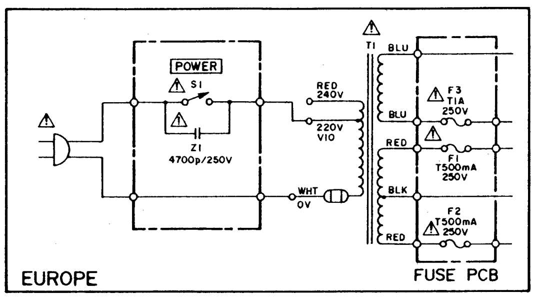
R/P PCB(1/2)			
U301	NJM78M12A	D301	LBA-01
U302	NJM79M12A	D302	MBK-02
U303	NJM78M05A	D303, D304	SM-1A-02
		D305	EQA01-13A
Q301	2SD985	D306	SM-1A-02
Q314	2SD985	D311	SM-1A-02
Q315	2SD313(F)	D312	GZA9.1L
Q316	KTN5014(GR)	D106～D108	1S2473HJ
Q118	2SA1015(GR)	D109	DS135D

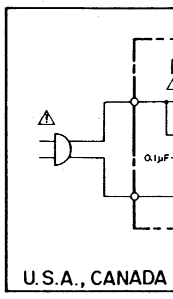

POWER
S1
Z1
4700p/250V
T1
RED 240V
220V V10
WHT 0V
BLU
RED
BLK
AUSTRALIA


POWER
S1
BRN (LIVE)
BLU (NEUTRAL)
Z1
4700p/250V
T1
RED 240V
220V V10
WHT 0V
BLU
RED
BLK
F3 T1A 250V
F1 T500mA 250V
F2 T500mA 250V
U.K.
FUSE PCB



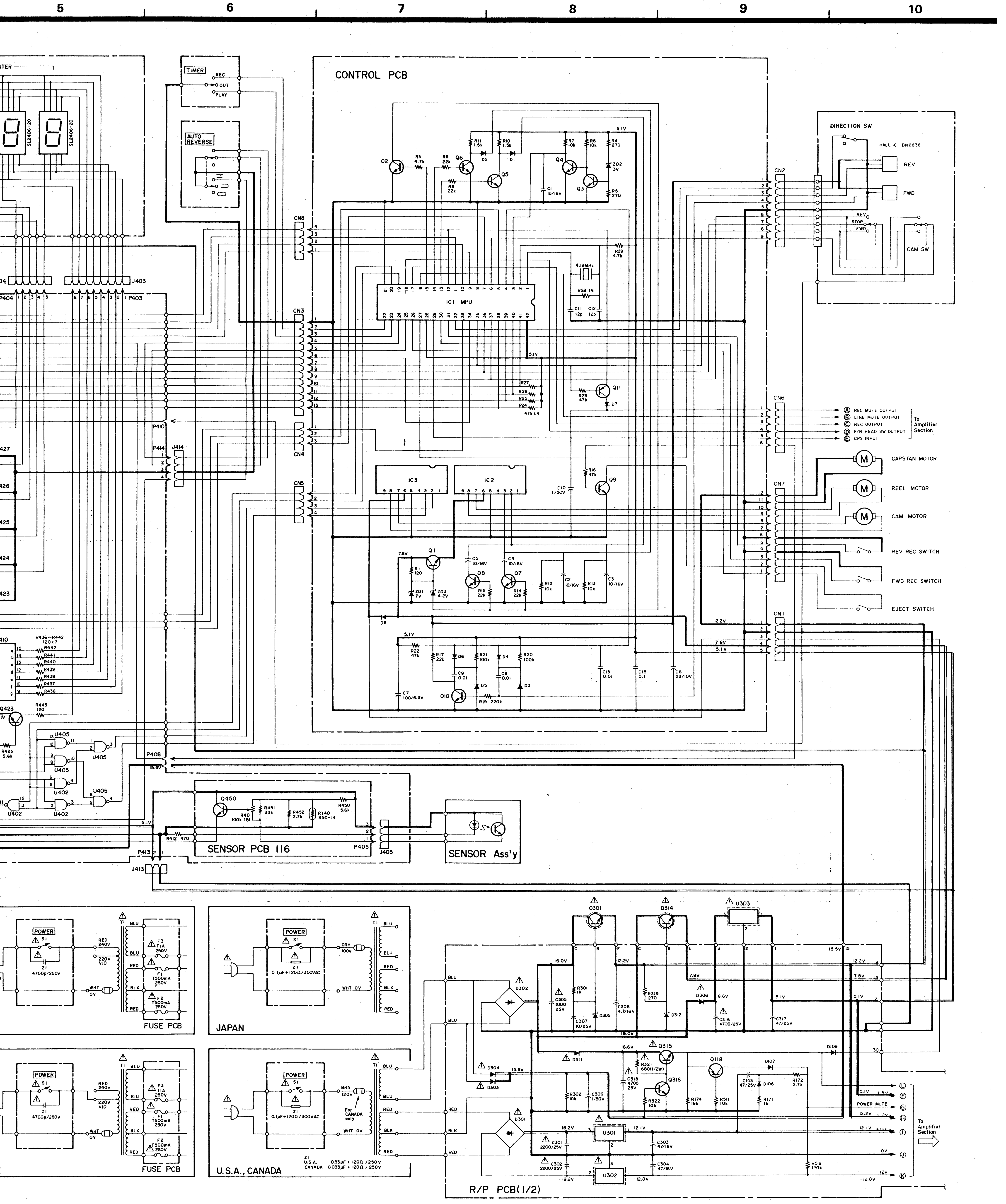

240V
220V
120V
100V
RED
V10
BRN
GRY
T1
BLU
RED
BLK
POWER
S1
Z1
0.01μF+300Ω/300VAC
WHT 0V
GENERAL EXPORT


POWER
S1
Z1
4700p/250V
T1
RED 240V
220V V10
WHT 0V
BLU
RED
BLK
F3 T1A 250V
F1 T500mA 250V
F2 T500mA 250V
EUROPE
FUSE PCB



NOTES

1. All resistors are ¼ watt, ±5%, unless otherwise noted.
   Resistor values are in ohms (k=1,000 ohms).
2. All capacitor values are in microfarads.
   All non-polarized capacitors are ±5%, Mylar unless otherwise noted.
3. Each voltage value shown above is the one measured in STOP mode.
4. ⚠ Parts marked with this sign ar
   They must always be replaced w
   the appropriate parts list and ensu
5. ▭ : Front panel indication
6. ——— : +B power supply circuit
7. A domestic, Japan, model of the V


5
6
7
8
9
10
TIMER
REC
OUT
PLAY
AUTO REVERSE
CONTROL PCB
IC1 MPU
IC2
IC3
4.19MHz
CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
DIRECTION SW
HALL IC DN6838
REV
FWD
CAM SW
Ⓐ REC MUTE OUTPUT
Ⓑ LINE MUTE OUTPUT
Ⓒ REC OUTPUT
Ⓓ F/R HEAD SW OUTPUT
Ⓔ CPS INPUT
To Amplifier Section
CAPSTAN MOTOR
REEL MOTOR
CAM MOTOR
REV REC SWITCH
FWD REC SWITCH
EJECT SWITCH
SENSOR PCB 116
SENSOR Ass'y
POWER
FUSE PCB
JAPAN
U.S.A., CANADA
R/P PCB(1/2)
U301
U302
U303
POWER MUTE
To Amplifier Section

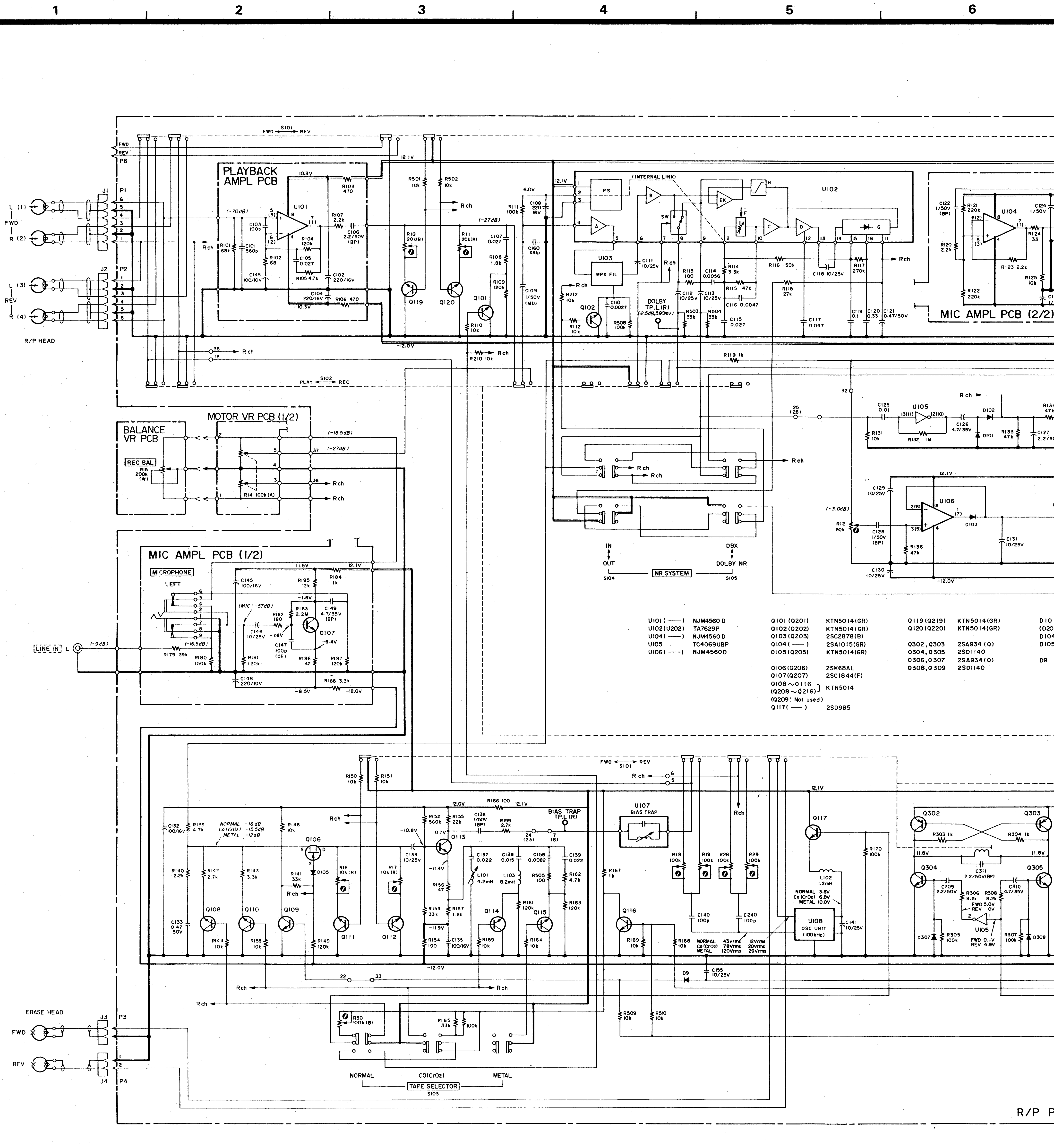
noted.

less otherwise noted.
sured in STOP mode.

4. ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
5. ▭ : Front panel indication
6. ——— : +B power supply circuit
7. A domestic, Japan, model of the V-95RX is the V-R1.

V-95RX **Stereo Cassette Deck**

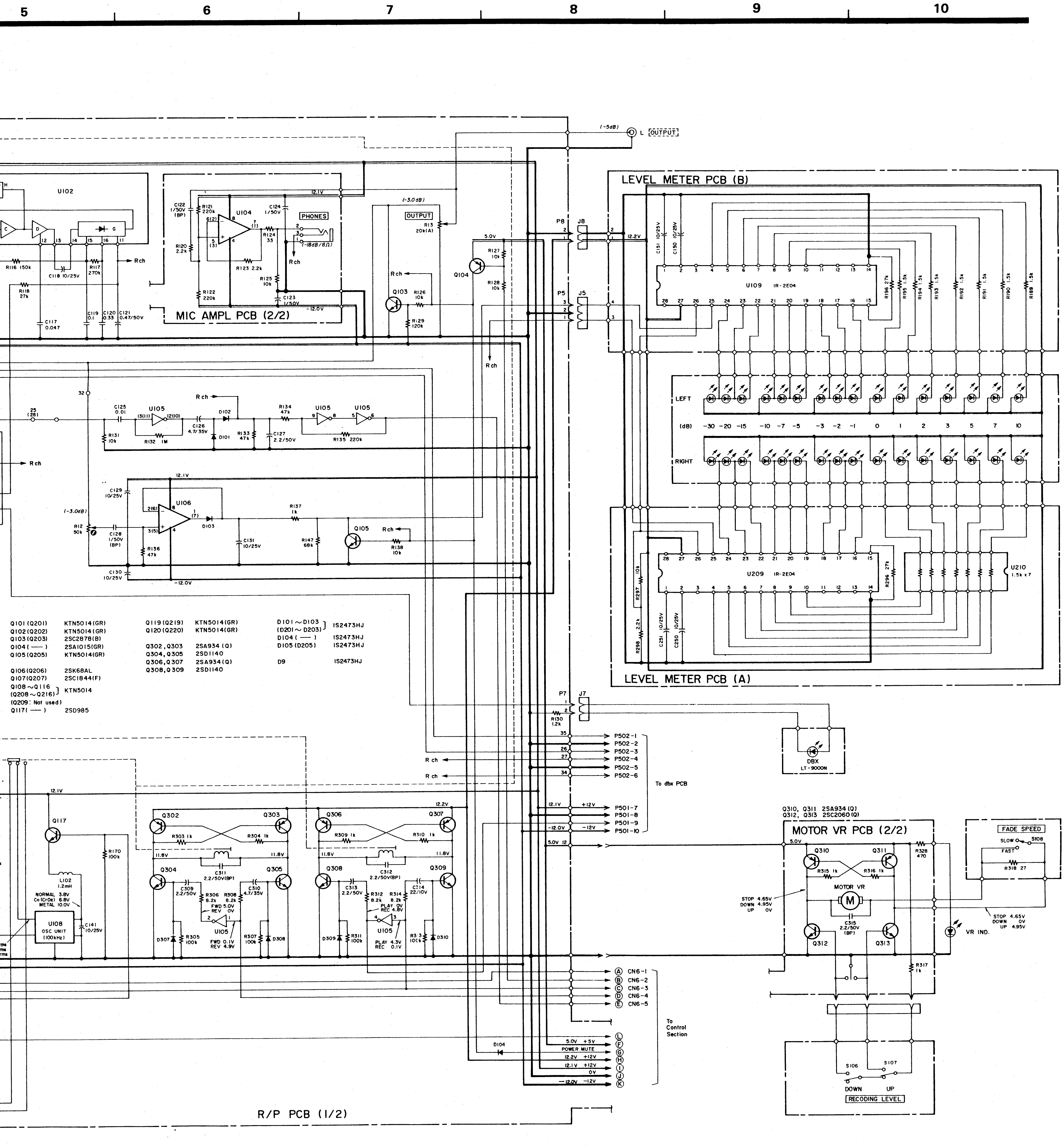
TEAC SCHEMATIC DIAGRAM (AMPLIFIER) V-95RX


1
2
3
4
5
6
PLAYBACK AMPL PCB
U101
U102
U103
MPX FIL
U104
MIC AMPL PCB (2/2)
U105
U106
R/P HEAD
L (1)
FWD
R (2)
L (3)
REV
R (4)
J1
J2
P1
P2
P6
S101
FWD ↔ REV
S102
PLAY ↔ REC
BALANCE VR PCB
REC BAL
MOTOR VR PCB (1/2)
MIC AMPL PCB (1/2)
MICROPHONE
LEFT
LINE IN
(INTERNAL LINK)
DOLBY TP.L (R)
IN ↔ OUT
S104
NR SYSTEM
DBX ↔ DOLBY NR
S105
U107
BIAS TRAP
BIAS TRAP TP.L (R)
U108
OSC UNIT (100kHz)
NORMAL
CO(CrO2)
METAL
TAPE SELECTOR
S103
ERASE HEAD
FWD
REV
J3
J4
P3
P4
R ch
R/P P

U101 (——)	NJM4560 D	Q101 (Q201)	KTN5014(GR)	Q119 (Q219)	KTN5014(GR)	D10	
U102 (U202)	TA7629P	Q102 (Q202)	KTN5014(GR)	Q120 (Q220)	KTN5014(GR)	(D20	
U104 (——)	NJM4560 D	Q103 (Q203)	2SC2878(B)			D104	
U105	TC4069UBP	Q104 (——)	2SA1015(GR)	Q302, Q303	2SA934 (Q)	D105	
U106 (——)	NJM4560D	Q105 (Q205)	KTN5014(GR)	Q304, Q305	2SD1140		
				Q306, Q307	2SA934 (Q)	D9	
		Q106 (Q206)	2SK68AL	Q308, Q309	2SD1140		
		Q107 (Q207)	2SC1844(F)				
		Q108 ~ Q116 (Q208 ~ Q216)	KTN5014				
		(Q209: Not used)					
		Q117 (——)	2SD985				

NOTES

1. Schematic diagram shown for left channel unless otherwise noted.
   Number in parenthesis indicate right channel terminals.
2. All resistors are ¼W, ±5%, unless otherwise noted.
   Resistor values are in ohms (k=1,000 ohms, M=1,000,000 ohms).
3. Capacitor values are in microfarads (p=picofarads).
   (CE) : Ceramic
   (BP) : Bipolar
   All non-polarized capacitors are ±5% Mylar unless otherwise noted.
4. ⚠ Parts marked with this sign are
   They must always be replaced wi
   the appropriate parts list and ensur
5. Voltage and level values are for ref
   0 dB=0.775V
6. ▭ : Front panel indication
7. ⬚ : Rear panel indication
8. ——— : +B power supply circuit
9. ——— : –B power supply circuit
10. A domestic, Japan, model of the V


5
6
7
8
9
10
(-5dB)
L OUTPUT
LEVEL METER PCB (B)
U109 IR-2E04
LEFT
(dB) -30 -20 -15 -10 -7 -5 -3 -2 -1 0 1 2 3 5 7 10
RIGHT
U209 IR-2E04
U210 1.5k x 7
LEVEL METER PCB (A)
U102
U104
PHONES
(-18dB/8Ω)
MIC AMPL PCB (2/2)
(-3.0dB)
OUTPUT
R13 20k(A)
Q103
Q104
U105
U106
Q105
Rch
12.1V
-12.0V
12.2V
5.0V
P8 J8
P5 J5
P7 J7
DBX LT-9000N
Q302 Q303 Q304 Q305
Q306 Q307 Q308 Q309
Q117
U108 OSC UNIT (100kHz)
NORMAL 3.8V Co(CrO2) 6.8V METAL 10.0V
P502-1
P502-2
P502-3
P502-4
P502-5
P502-6
To dbx PCB
P501-7
P501-8
P501-9
P501-10
CN6-1
CN6-2
CN6-3
CN6-4
CN6-5
To Control Section
5.0V +5V
POWER MUTE
12.2V +12V
12.1V +12V
0V
-12.0V -12V
D104
Q310, Q311 2SA934(Q)
Q312, Q313 2SC2060(Q)
MOTOR VR PCB (2/2)
MOTOR VR
STOP 4.65V DOWN 4.95V UP 0V
STOP 4.65V DOWN 0V UP 4.95V
VR IND.
FADE SPEED
SLOW
FAST
S108
S106
S107
DOWN
UP
RECODING LEVEL
R/P PCB (1/2)

Q101 (Q201)	KTN5014(GR)	Q119 (Q219)	KTN5014(GR)	D101 ～ D103 (D201 ～ D203)	1S2473HJ
Q102 (Q202)	KTN5014(GR)	Q120 (Q220)	KTN5014(GR)	D104 (——)	1S2473HJ
Q103 (Q203)	2SC2878(B)			D105 (D205)	1S2473HJ
Q104 (——)	2SA1015(GR)	Q302, Q303	2SA934 (Q)		
Q105 (Q205)	KTN5014(GR)	Q304, Q305	2SD1140	D9	1S2473HJ
		Q306, Q307	2SA934 (Q)		
Q106 (Q206)	2SK68AL	Q308, Q309	2SD1140		
Q107 (Q207)	2SC1844(F)				
Q108 ～ Q116 (Q208 ～ Q216)	KTN5014				
(Q209: Not used)					
Q117 (——)	2SD985				

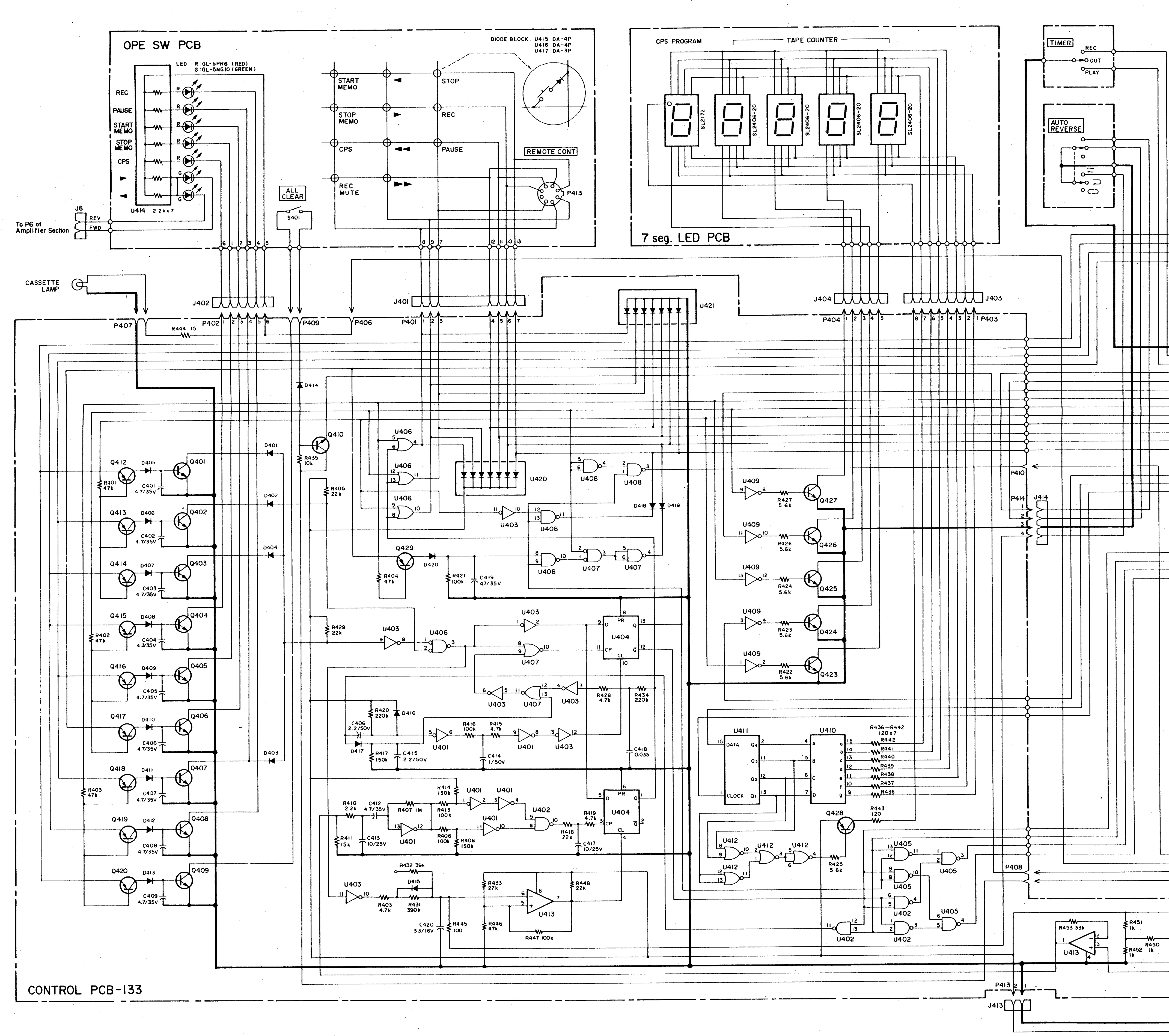
otherwise noted.
ninals.
.
000,000 ohms).
).

s otherwise noted.

4. ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
5. Voltage and level values are for reference only.
   0 dB=0.775V
6. ▭ : Front panel indication
7. ⬚ : Rear panel indication
8. ——— : +B power supply circuit
9. ——— : –B power supply circuit
10. A domestic, Japan, model of the V-95RX is the V-R1.

V-95RX **Stereo Cassette Deck**

TEAC SCHEMATIC DIAGRAM (CONTROL) V-95RX/V-R1


OPE SW PCB
LED R: GL-5PR6 (RED)
G: GL-5NG10 (GREEN)
REC
PAUSE
START MEMO
STOP MEMO
CPS
U414 2.2k×7
J6
REV
FWD
To P6 of Amplifier Section
ALL CLEAR
S401
DIODE BLOCK U415 DA-4P
U416 DA-4P
U417 DA-3P
START MEMO
STOP MEMO
CPS
REC MUTE
STOP
REC
PAUSE
REMOTE CONT
P413
CPS PROGRAM
TAPE COUNTER
SL2172
SL2406-20
7 seg. LED PCB
TIMER
REC
OUT
PLAY
AUTO REVERSE
CASSETTE LAMP
J402
J401
J404
J403
P407
P402
P409
P406
P401
P404
P403
R444 15
U421
U420
D414
Q410
R435 10k
U406
U408
U403
U407
U409
U404
U401
U402
U411
U410
U412
U405
U413
Q401
Q402
Q403
Q404
Q405
Q406
Q407
Q408
Q409
Q412
Q413
Q414
Q415
Q416
Q417
Q418
Q419
Q420
Q423
Q424
Q425
Q426
Q427
Q428
Q429
D401
D402
D403
D404
D418
D419
D420
P410
P414
J414
P408
DATA
CLOCK
R436~R442 120×7
R443 120
R453 33k
R451 1k
R452 1k
R450
P413
J413
CONTROL PCB-133

CONTROL PCB-133

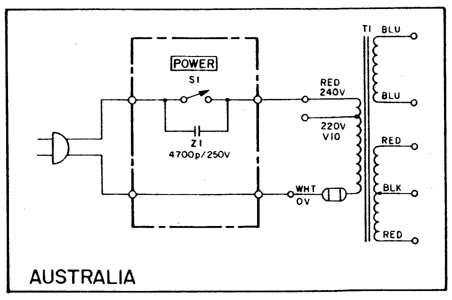
U401	TC4069UBP	Q401 ～ Q410	KTN5014(GR)
U402	TC4011BP	Q411	(Not used)
U403	TC4069UBP	Q412 ～ Q420	2SA1015(GR)
U404	TC4013BP	Q421, Q422	(Not used)
U405	TC4011BP	Q423 ～ Q427	KTN5014(GR)
		Q428, Q429	2SA1015(GR)
U406	TC4071BP		
U407	TC4001BP	D401 ～ D420	IS2473HJ
U408	TC4011BP		
U409	TC4069BP		
U410	TC5002BP		
U411	TC4015BP	U420	DA-8P
U412	TC4001BP	U421	DA-8N
U413	LM2904		

CONTROL PCB

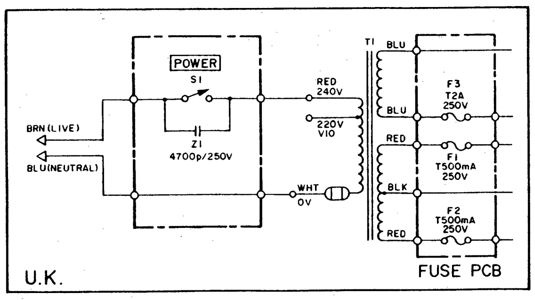
IC1	MPU T4-38262
IC2, IC3	BA6208
Q1	2SD400(E)
Q2 ～ Q10	2SC1815(Y)
Q11	2SA1015(Y)
D1 ～ D7	IS2473HJ
D8	IN4002
ZD1	HZ7B2
ZD2	HZ3C1
ZD3	WZ044

R/P PCB(1/2)

U301	NJM78M12A	D301	LBA-01
U302	NJM79M12A	D302	MBK-02
U303	NJM78M05A	D303, D304	SM-1A-02
		D305	EQA01-13A
Q301	2SD985	D306	SM-1A-02
Q314	2SD985	D311	SM-1A-02
Q315	2SD313(F)	D312	GZA9.1L
Q316	KTN5014(GR)	D106 ～ D108	IS2473HJ
Q118	2SA1015 (GR)	D109	DS135D

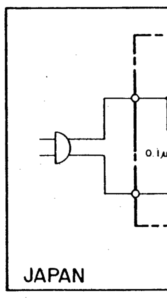

POWER
S1
Z1
4700p/250V
T1
BLU
RED 240V
BLU
220V VIO
RED
WHT 0V
BLK
RED

AUSTRALIA

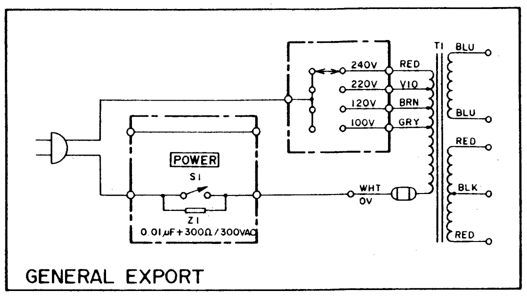

POWER
S1
Z1
4700p/250V
BRN(LIVE)
BLU(NEUTRAL)
T1
BLU
RED 240V
220V VIO
WHT 0V
BLU
RED
BLK
RED
F3 T2A 250V
F1 T500mA 250V
F2 T500mA 250V

U.K.

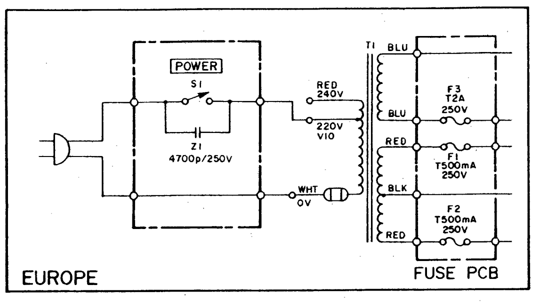
FUSE PCB



JAPAN

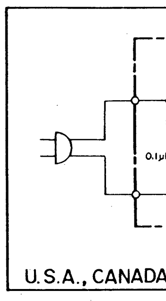

240V
220V
120V
100V
RED
VIO
BRN
GRY
T1
BLU
BLU
RED
BLK
RED
POWER
S1
Z1
0.01μF+300Ω/300VAC
WHT 0V

GENERAL EXPORT


POWER
S1
Z1
4700p/250V
RED 240V
220V VIO
WHT 0V
T1
BLU
BLU
RED
BLK
RED
F3 T2A 250V
F1 T500mA 250V
F2 T500mA 250V

EUROPE

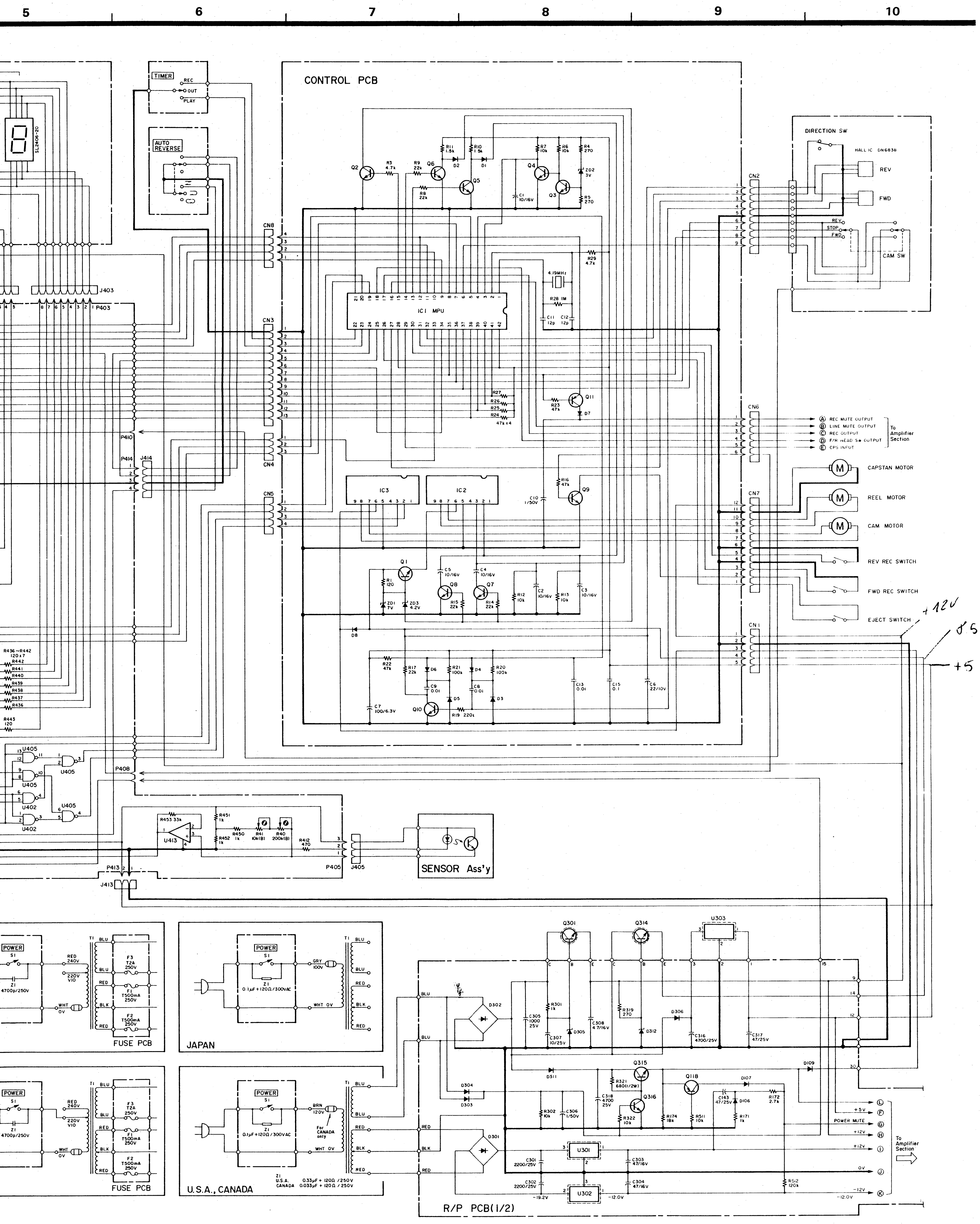
FUSE PCB



U.S.A., CANADA

NOTES:

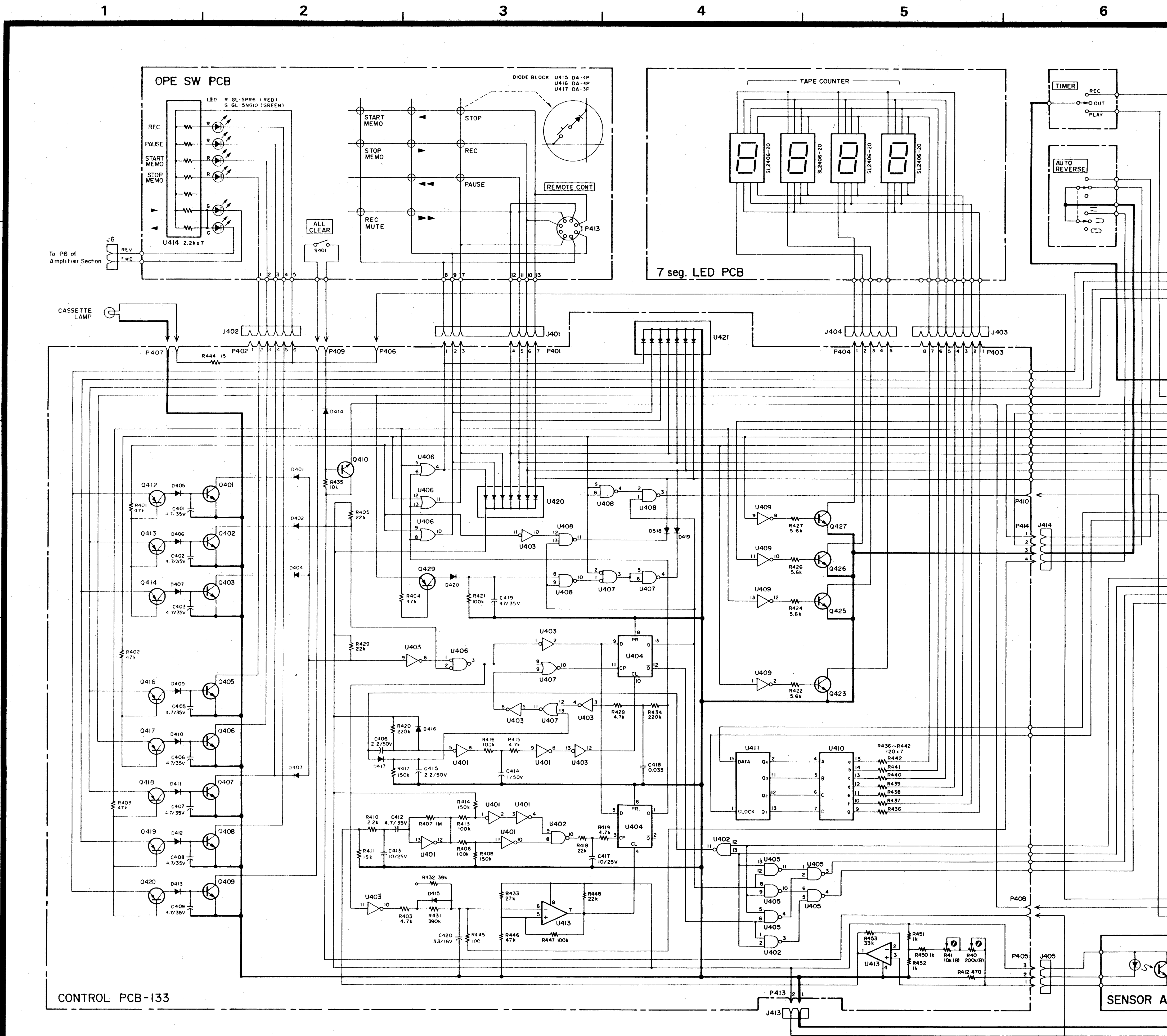
1. A domestic, Japan, model of the V-95RX is the V-R1.
2. Ser. No. 8941 and after.

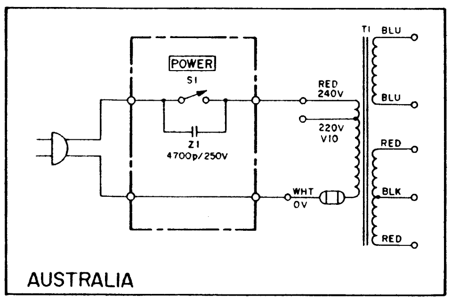

5
6
7
8
9
10
TIMER
REC
OUT
PLAY
AUTO REVERSE
SL2406-20
J403
P403
CONTROL PCB
IC1 MPU
4.19MHz
R28 1M
C11 12p
C12 12p
Q2
Q6
Q5
Q4
Q3
Q11
Q9
Q1
Q8
Q7
Q10
IC3
IC2
CN8
CN3
CN4
CN5
CN2
CN6
CN7
CN1
P410
P414
J414
DIRECTION SW
HALL IC DN6838
REV
FWD
STOP
CAM SW
Ⓐ REC MUTE OUTPUT
Ⓑ LINE MUTE OUTPUT
Ⓒ REC OUTPUT
Ⓓ F/R HEAD Sw OUTPUT
Ⓔ CPS INPUT
To Amplifier Section
CAPSTAN MOTOR
REEL MOTOR
CAM MOTOR
REV REC SWITCH
FWD REC SWITCH
EJECT SWITCH
+12V
85V
+5
R436~R442 120 x 7
R443 120
U405
U402
P408
R453 33k
U413
R451 1k
R452 1k
R450 1k
R41 10k(B)
R40 200k(B)
R412 470
P405
J405
SENSOR Ass'y
P413
J413
POWER
S1
Z1 4700p/250V
RED 240V
220V V10
WHT 0V
T1
BLU
RED
BLK
F3 T2A 250V
F1 T500mA 250V
F2 T500mA 250V
FUSE PCB
JAPAN
Z1 0.1μF+120Ω/300VAC
GRY 100V
U.S.A., CANADA
BRN 120V
For CANADA only
Z1 U.S.A. 0.33μF + 120Ω / 250V CANADA 0.033μF + 120Ω / 250V
Q301
Q314
U303
D302
D301
Q315
Q316
Q118
U301
U302
C301 2200/25V
C302 2200/25V
-19.2V
-12.0V
+5V
POWER MUTE
+12V
0V
-12V
Ⓛ
Ⓕ
Ⓖ
Ⓗ
Ⓘ
Ⓙ
Ⓚ
R/P PCB(1/2)

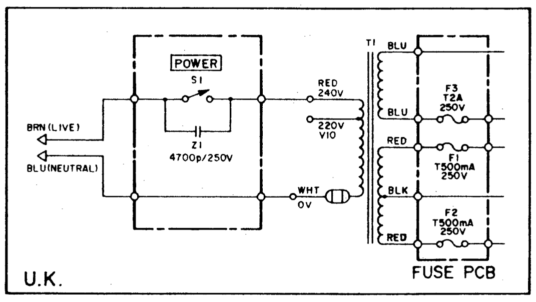
V-95RX / V-R1

Auto-Reverse Stereo Cassette Deck

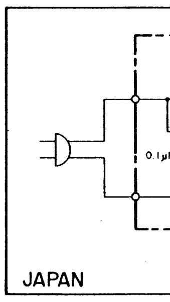
TEAC SCHEMATIC DIAGRAM (CONTROL) V-90R / V-R2


1
2
3
4
5
6
A
B
C
D
E
OPE SW PCB
LED R GL-5PR6 (RED) G GL-5NG10 (GREEN)
REC
PAUSE
START MEMO
STOP MEMO
U414 2.2k×7
J6
To P6 of Amplifier Section
REV
FAD
DIODE BLOCK U415 DA-4P U416 DA-4P U417 DA-3P
START MEMO
STOP MEMO
STOP
REC
PAUSE
REC MUTE
REMOTE CONT
P413
ALL CLEAR
S401
TAPE COUNTER
SL2406-20
7 seg. LED PCB
TIMER
REC
OUT
PLAY
AUTO REVERSE
CASSETTE LAMP
J402
J401
J404
J403
U421
P407
P402
P409
P406
P401
P404
P403
R444 15
D414
Q410
R435 10k
U406
U420
U408
U403
U407
U409
Q427
Q426
Q425
Q423
Q429
R404 47k
D420
R421 100k
C419 47/35V
R405 22k
R429 22k
U404
U401
U402
U405
U411
U410
U413
R436~R442 120×7
R420 220k
D416
D417
C406 2.2/50V
R417 150k
C415 2.2/50V
C414 1/50V
C418 0.033
R410 2.2k
C412 4.7/35V
R407 1M
R411 15k
C413 10/25V
R406 100k
R408 150k
R414 150k
R413 100k
R419 4.7k
R418 22k
C417 10/25V
R432 39k
D415
R403 4.7k
R431 390k
R433 27k
R448 22k
C420 33/16V
R445 10C
R446 47k
R447 100k
R453 33k
R451 1k
R452 1k
R450 1k
R41 10k(B)
R40 200k(B)
R412 470
Q412
Q413
Q414
Q416
Q417
Q418
Q419
Q420
Q401
Q402
Q403
Q405
Q406
Q407
Q408
Q409
D405
D406
D407
D409
D410
D411
D412
D413
D401
D402
D404
D403
R401 47k
R402 47k
R403 47k
C401 4.7/35V
C402 4.7/35V
C403 4.7/35V
C405 4.7/35V
C406 4.7/35V
C407 4.7/35V
C408 4.7/35V
C409 4.7/35V
D518
D419
R427 5.6k
R426 5.6k
R424 5.6k
R422 5.6k
R428 4.7k
R434 220k
R416 100k
P415 4.7k
P410
P414
J414
P408
P405
J405
P413
J413
CONTROL PCB-133
SENSOR A

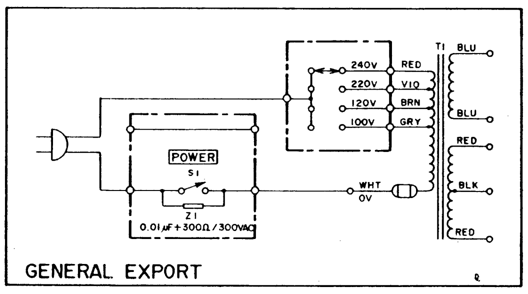

POWER
S1
Z1 4700p/250V
T1
RED 240V
220V V10
WHT 0V
BLU
RED
BLK
AUSTRALIA

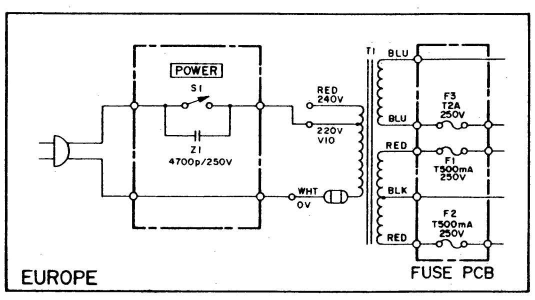

POWER
S1
Z1 4700p/250V
BRN (LIVE)
BLU (NEUTRAL)
RED 240V
220V V10
WHT 0V
T1
BLU
RED
BLK
F3 T2A 250V
F1 T500mA 250V
F2 T500mA 250V
U.K.

FUSE PCB

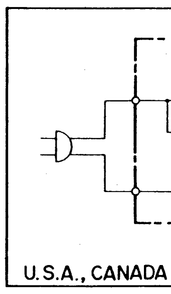


JAPAN


240V
220V
120V
100V
RED
V10
BRN
GRY
T1
BLU
RED
BLK
POWER
S1
Z1
0.01μF+300Ω/300VAC
WHT 0V
GENERAL EXPORT


POWER
S1
Z1 4700p/250V
RED 240V
220V V10
WHT 0V
T1
BLU
RED
BLK
F3 T2A 250V
F1 T500mA 250V
F2 T500mA 250V
EUROPE

FUSE PCB


U.S.A., CANADA

CONTROL PCB-133

U401		Q401 ~ Q403	KTN5014(GR)	U420	DA-8P
U402	TC4011BP	Q414	(Not used)	U421	DA-8N
U403		Q415 ~ Q410	KTN5014(GR)		
U404	TC4013BP	Q411, Q422	(Not used)		
U405	TC4011BP	Q412 ~ Q420	2SA1015(CR) 2SA1015(GR)		
U406	TC4071BP	Q421, Q422	(Not used)		
U407	TC4001BP	Q423	KTN5014(GR)		
U408	TC4011BP	Q424	(Not used)		
U409	TC4069BP	Q425 ~ Q427	KTN5014(GR)		
U410	TC5002BP	Q428	(Not used)		
U411	TC4015BP	Q429	2SA1015(GR)		
U413	LM2904				
		D401 ~ D407	1S2473HJ		
		D408	(Not used)		
		D409 ~ D420	1S2473HJ		

R/P PCB (1/2)

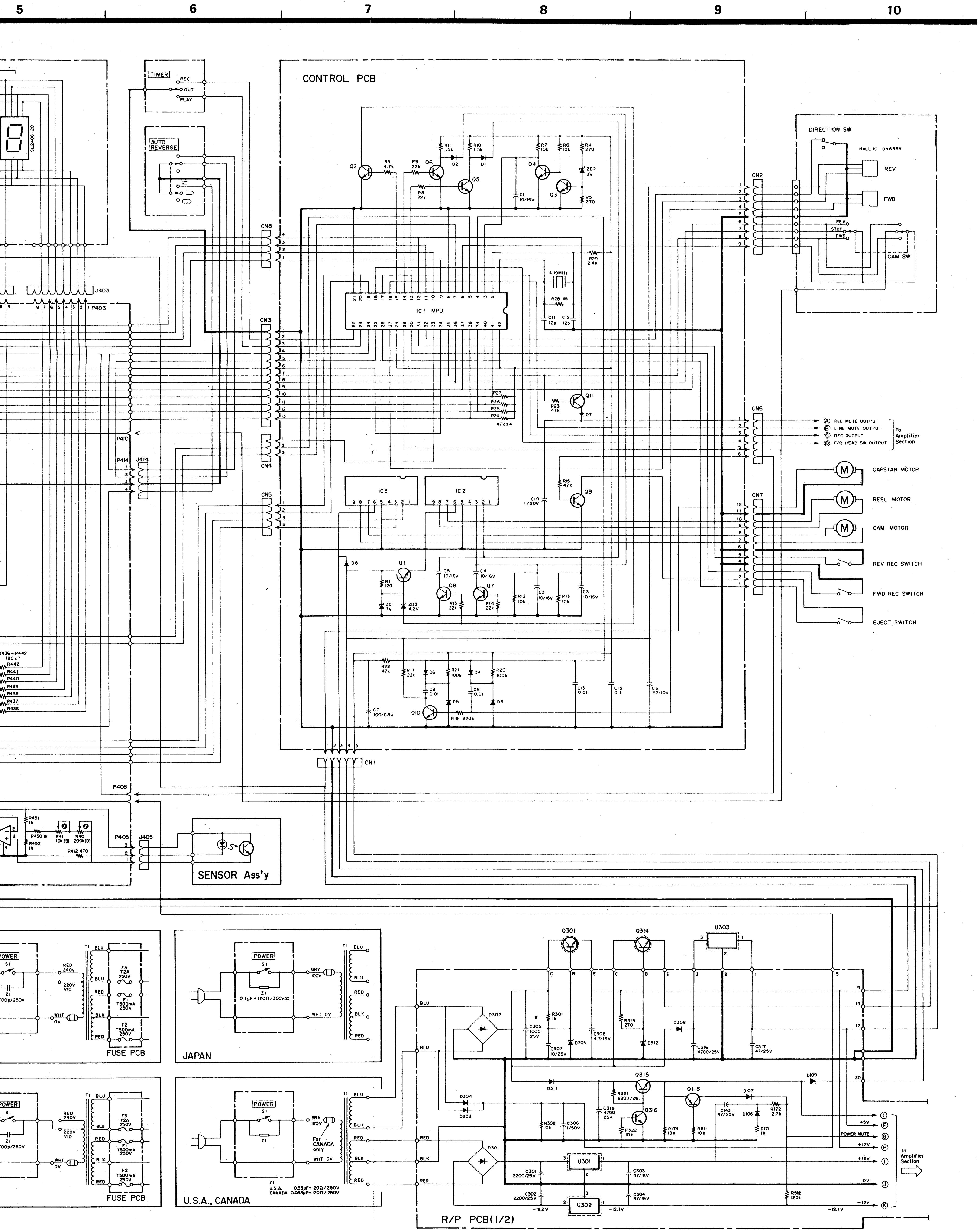
U301	NJM78M12A	D301	LBA-01
U302	NJM79M12A	D302	MBK-02
U303	NJM78M05A	D303, D304	SM-1A-02
		D305	EQA01-13A
Q301	2SD985	D306	SM-1A-02
Q314	2SD985	D311	SM-1A-02
Q315	2SD313(F)	D312	GZA9.1L
Q316	KTN5014(GR)	D106 ~ D108	1S2473HJ
Q118	2SA1015(GR)	D109	DS-135D

CONTROL PCB

IC1	MPU T4-38262
IC2, IC3	BA6208
Q1	2SD400(E)
Q2 ~ Q10	2SC1815(Y)
Q11	2SA1015(Y)
D1 ~ D7	1S2473HJ
D8	1N4002
ZD1	HZ7B2
ZD2	HZ3C1
ZD3	WZ044

NOTES:

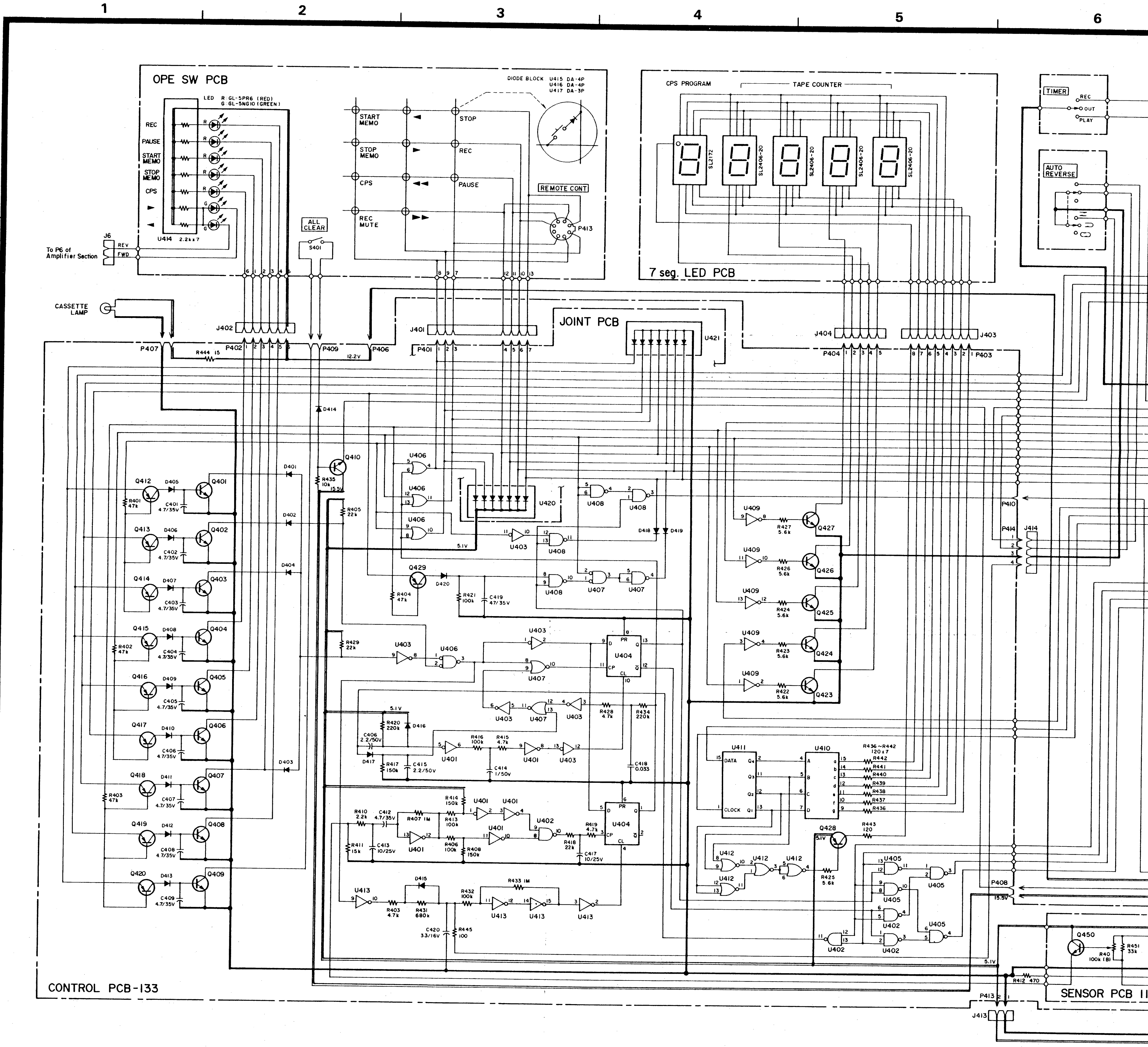
1. A domestic, Japan, model of the V-90R is the V-R2.
2. Ser. No. 9371 and after.


5
6
7
8
9
10
TIMER
REC
OUT
PLAY
AUTO REVERSE
CONTROL PCB
IC1 MPU
4.19MHz
IC3
IC2
CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
DIRECTION SW
HALL IC DN6838
REV
FWD
STOP
CAM SW
Ⓐ REC MUTE OUTPUT
Ⓑ LINE MUTE OUTPUT
Ⓒ REC OUTPUT
Ⓓ F/R HEAD SW OUTPUT
To Amplifier Section
CAPSTAN MOTOR
REEL MOTOR
CAM MOTOR
REV REC SWITCH
FWD REC SWITCH
EJECT SWITCH
J403
P403
P410
P414
J414
P408
P405
J405
SENSOR Ass'y
SL2406-20
POWER
S1
FUSE PCB
JAPAN
U.S.A., CANADA
For CANADA only
Z1 0.1μF+120Ω/300VAC
Z1 U.S.A. 0.033μF+120Ω/250V CANADA 0.033μF+120Ω/250V
R/P PCB(1/2)
Q301
Q314
U303
U301
U302
Q315
Q316
Q118
D301
D302
+5V Ⓛ
POWER MUTE Ⓖ
+12V Ⓗ
+12V Ⓘ
0V Ⓙ
-12V Ⓚ
-19.2V
-12.1V
To Amplifier Section

V-90R / V-R2

Auto-Reverse Stereo Cassette Deck

TEAC SCHEMATIC DIAGRAM (CONTROL) **V-95RX**


1
2
3
4
5
6
A
B
C
D
E
OPE SW PCB
LED R: GL-5PR6 (RED) G: GL-5NG10 (GREEN)
REC
PAUSE
START MEMO
STOP MEMO
CPS
U414 2.2k x 7
J6
REV
FWD
To P6 of Amplifier Section
DIODE BLOCK U415 DA-4P U416 DA-4P U417 DA-3P
START MEMO
STOP MEMO
CPS
REC MUTE
STOP
REC
PAUSE
REMOTE CONT
P413
ALL CLEAR
S401
CPS PROGRAM
TAPE COUNTER
SL2172
SL2406-20
7 seg. LED PCB
TIMER
REC
OUT
PLAY
AUTO REVERSE
CASSETTE LAMP
J402
P407
P402
R444 15
P409
12.2V
P406
J401
P401
JOINT PCB
U421
J404
J403
P404
P403
D414
Q410
R435 10k
15.5V
R405 22k
U406
U420
U408
U403
5.1V
Q429
D420
R404 47k
R421 100k
C419 47/35V
U407
D418
D419
U409
R427 5.6k
Q427
R426 5.6k
Q426
R424 5.6k
Q425
R423 5.6k
Q424
R422 5.6k
Q423
P410
P414
J414
Q412
Q401
R401 47k
D405
C401 4.7/35V
Q413
Q402
D406
C402 4.7/35V
Q414
Q403
D407
C403 4.7/35V
Q415
Q404
R402 47k
D408
C404 4.7/35V
Q416
Q405
D409
C405 4.7/35V
Q417
Q406
D410
C406 4.7/35V
Q418
Q407
R403 47k
D411
C407 4.7/35V
Q419
Q408
D412
C408 4.7/35V
Q420
Q409
D413
C409 4.7/35V
D401
D402
D404
D403
R429 22k
U404
PR
CP
CL
R428 4.7k
R434 220k
R420 220k
D416
C406 2.2/50V
D417
R417 150k
C415 2.2/50V
U401
R416 100k
R415 4.7k
C414 1/50V
C418 0.033
R414 150k
R410 2.2k
C412 4.7/35V
R407 1M
R413 100k
U402
R419 4.7k
R418 22k
C417 10/25V
R411 15k
C413 10/25V
R406 100k
R408 150k
D415
U413
R403 4.7k
R431 680k
R432 100k
R433 1M
C420 33/16V
R445 100
U411
DATA
CLOCK
U410
R436~R442 120 x 7
R441
R440
R439
R438
R437
R436
Q428
R443 120
U412
R425 5.6k
U405
P408
15.5V
Q450
R40 100k (B)
R451 33k
R412 470
5.1V
CONTROL PCB-133
SENSOR PCB I
P413
J413

CONTROL PCB-133

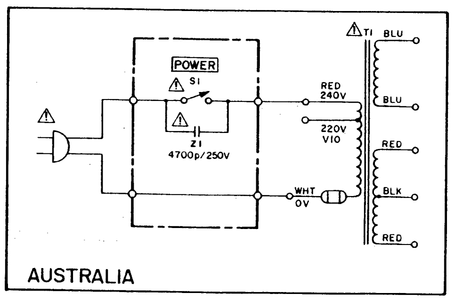
U401	TC4069UBP	Q401 ~ Q410	KTN5014(GR)
U402	TC4011BP	Q411	(Not used)
U403	TC4069UBP	Q412 ~ Q420	2SA1015(GR)
U404	TC4013BP	Q421, Q422	(Not used)
U405	TC4011BP	Q423 ~ Q427	KTN5014(GR)
		Q428, Q429	2SA1015(GR)
U406	TC4071BP		
U407	TC4001BP	D401 ~ D420	IS2473HJ
U408	TC4011BP		
U409	TC4069BP	Q450	KTN5014 (GR)
U410	TC5002BP		
U411	TC4015BP	U420	DA-8P (or D421~D427 IS2473HJ x7)
U412	TC4001BP	U421	DA-8N (or D428~D434 IS2473HJ x7)
U413	MSM4049		

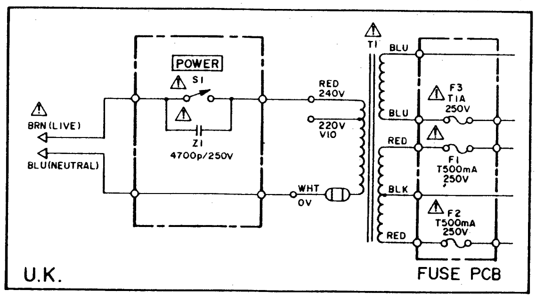
CONTROL PCB

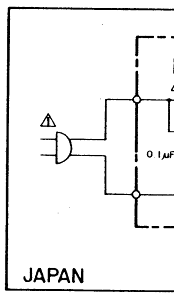
IC1	MPU T4-38262
IC2, IC3	BA6208
Q1	2SD400(E)
Q2 ~ Q10	2SC1815(Y)
Q11	2SA1015(Y)
D1 ~ D7	IS2473HJ
D8	IN4002
ZD1	HZ7B2
ZD2	HZ3C1
ZD3	WZ046

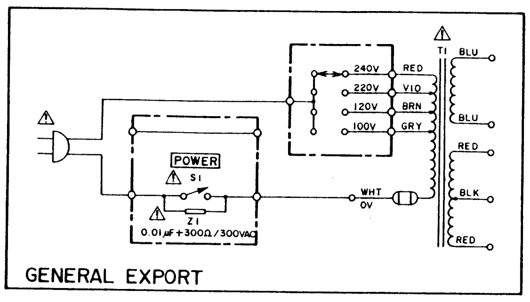
R/P PCB(1/2)

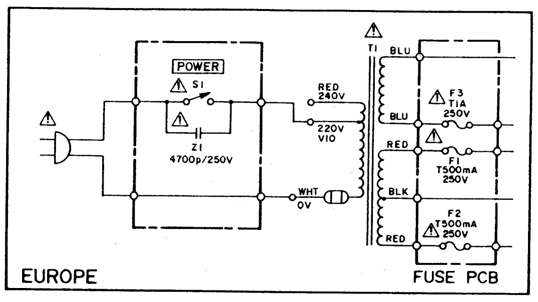
U301	NJM78M12A	D301	LBA-01
U302	NJM79M12A	D302	MBK-02
U303	NJM78M05A	D303, D304	SM-1A-02
		D305	EQA01-13A
Q301	2SD985	D306	SM-1A-02
Q314	2SD985	D311	SM-1A-02
Q315	2SD313(F)	D312	GZA9.1L
Q316	KTN5014(GR)	D106 ~ D108	IS2473HJ
Q118	2SA1015 (GR)	D109	DS135D

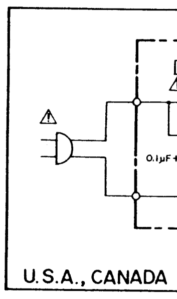

POWER
S1
Z1 4700p/250V
T1
RED 240V
220V V10
WHT 0V
BLU
RED
BLK
AUSTRALIA


POWER
S1
BRN (LIVE)
BLU (NEUTRAL)
Z1 4700p/250V
RED 240V
220V V10
WHT 0V
T1
BLU
RED
BLK
F3 T1A 250V
F1 T500mA 250V
F2 T500mA 250V
U.K.
FUSE PCB



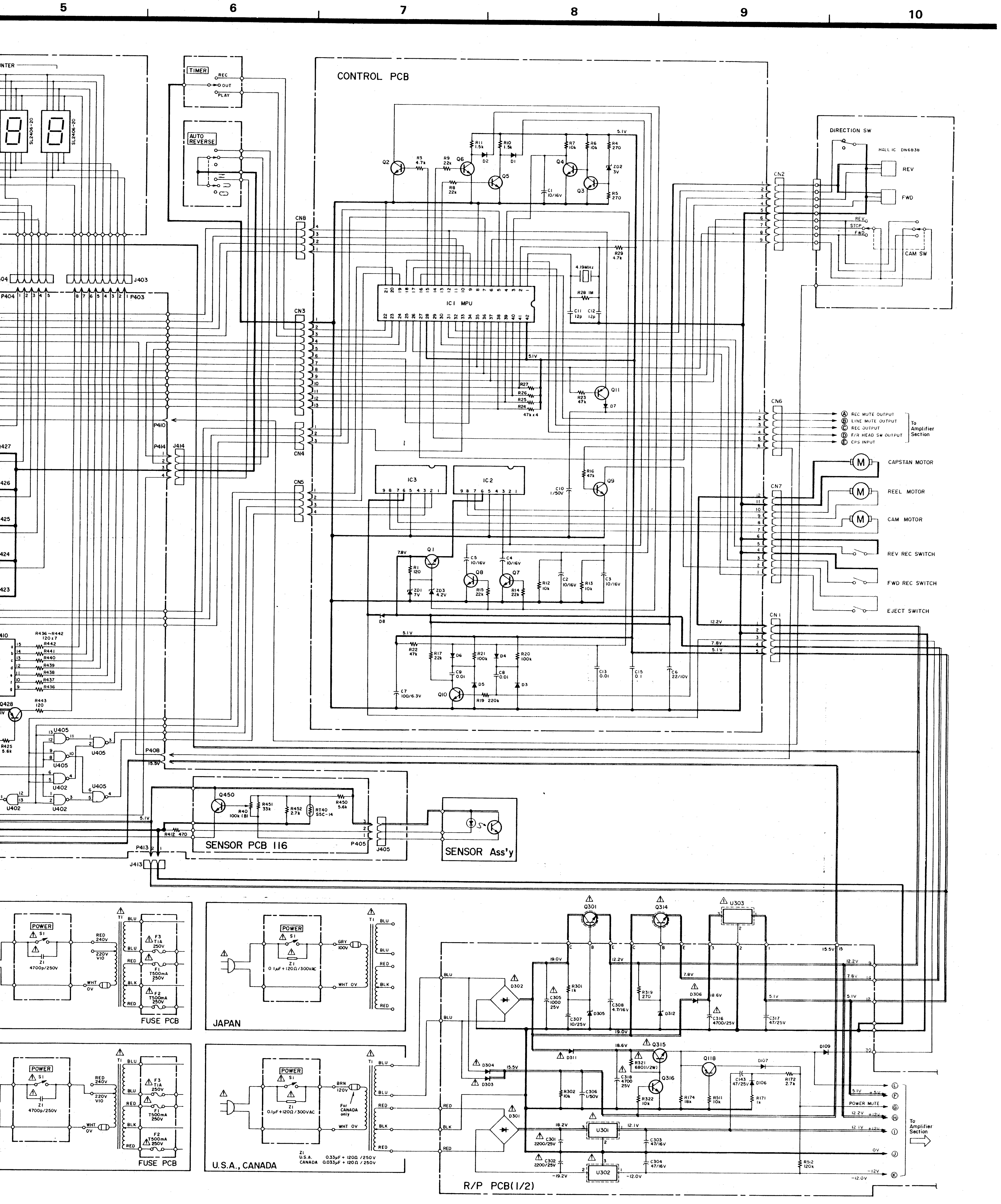

240V
220V
120V
100V
RED
V10
BRN
GRY
T1
BLU
RED
BLK
POWER
S1
Z1 0.01μF+300Ω/300VAC
WHT 0V
GENERAL EXPORT


POWER
S1
Z1 4700p/250V
RED 240V
220V V10
WHT 0V
T1
BLU
RED
BLK
F3 T1A 250V
F1 T500mA 250V
F2 T500mA 250V
EUROPE
FUSE PCB


0.1μF
U.S.A., CANADA

NOTES

1. All resistors are ¼ watt, ±5%, unless otherwise noted.
   Resistor values are in ohms (k=1,000 ohms).
2. All capacitor values are in microfarads.
   All non-polarized capacitors are ±5%, Mylar unless otherwise noted.
3. Each voltage value shown above is the one measured in STOP mode.
4. ⚠ Parts marked with this sign are
   They must always be replaced wi
   the appropriate parts list and ensur
5. ▭ : Front panel indication
6. ──── : +B power supply circuit
7. A domestic, Japan, model of the V-


5
6
7
8
9
10
TIMER
REC
OUT
PLAY
AUTO REVERSE
SL2406-20
CONTROL PCB
IC1 MPU
4.19MHz
IC3
IC2
CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
DIRECTION SW
HALL IC DN6838
REV
FWD
STOP
CAM SW
Ⓐ REC MUTE OUTPUT
Ⓑ LINE MUTE OUTPUT
Ⓒ REC OUTPUT
Ⓓ F/R HEAD SW OUTPUT
Ⓔ CPS INPUT
To Amplifier Section
CAPSTAN MOTOR
REEL MOTOR
CAM MOTOR
REV REC SWITCH
FWD REC SWITCH
EJECT SWITCH
J403
P403
P404
P408
P410
P413
J413
P414
J414
U402
U405
Q428
SENSOR PCB 116
Q450
P405
J405
SENSOR Ass'y
POWER
S1
Z1
4700p/250V
T1
F1 T500mA 250V
F2 T500mA 250V
F3 T1A 250V
FUSE PCB
JAPAN
U.S.A., CANADA
Z1 U.S.A. 0.33μF + 120Ω /250V
CANADA 0.033μF + 120Ω /250V
For CANADA only
Q301
Q314
U303
Q315
Q316
Q118
D301
D302
D304
U301
U302
R/P PCB(1/2)
Ⓛ
Ⓕ
Ⓖ POWER MUTE
Ⓗ
Ⓘ
Ⓙ 0V
Ⓚ
To Amplifier Section

noted.

ess otherwise noted.

ured in STOP mode.

4. ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.

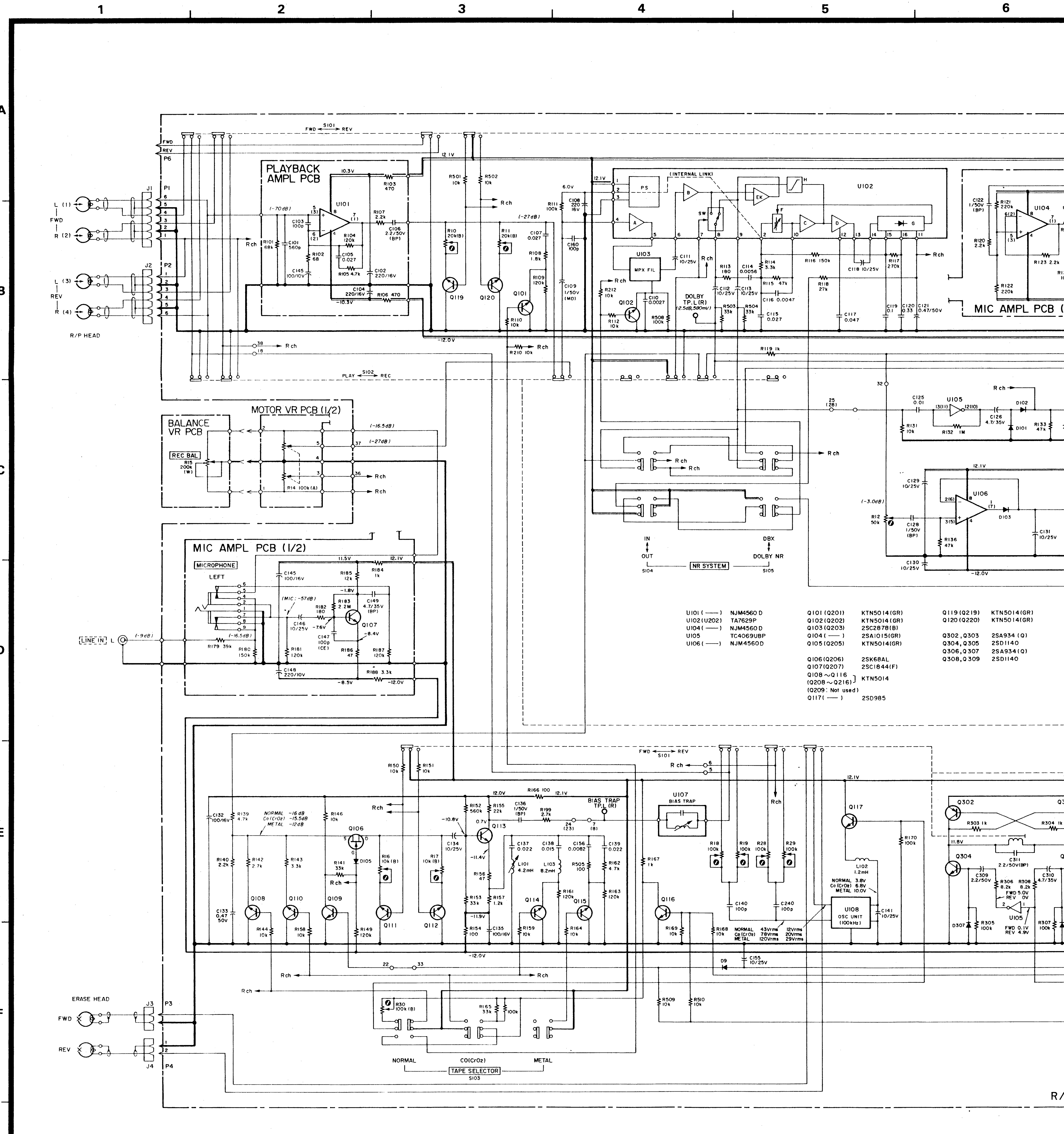
5. ▭ : Front panel indication

6. ——— : +B power supply circuit

7. A domestic, Japan, model of the V-95RX is the V-R1.

V-95RX Stereo Cassette Deck

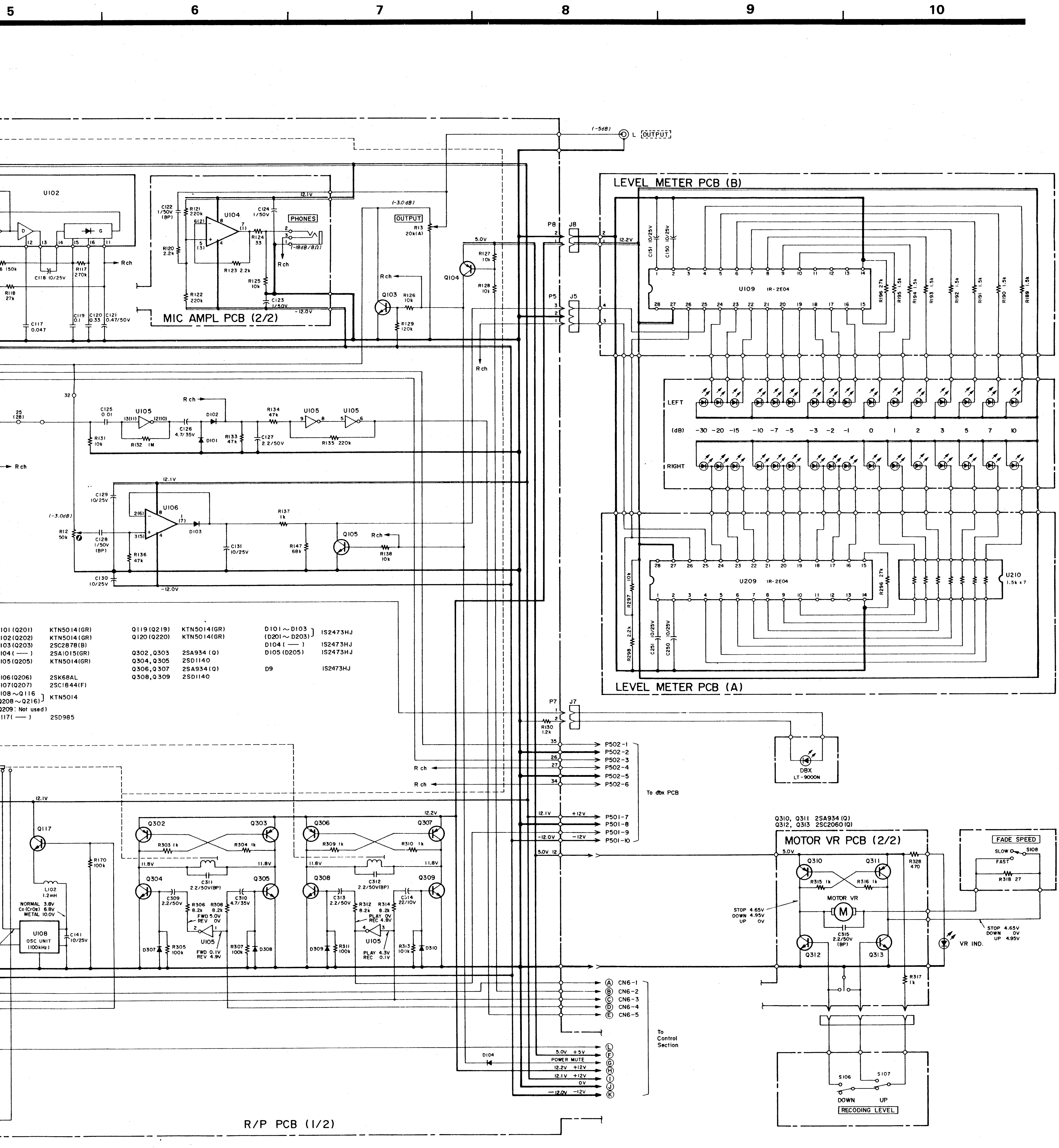
TEAC SCHEMATIC DIAGRAM (AMPLIFIER) V-95RX


1
2
3
4
5
6
A
B
C
D
E
F
G
H
PLAYBACK AMPL PCB
U101
U102
U103
MPX FIL
U104
MIC AMPL PCB
(INTERNAL LINK)
PS
DOLBY TP.L (R)
R/P HEAD
L (1)
FWD
R (2)
L (3)
REV
R (4)
J1
J2
P1
P2
P6
S101
FWD
REV
S102
PLAY
REC
BALANCE VR PCB
REC BAL
MOTOR VR PCB (1/2)
MIC AMPL PCB (1/2)
MICROPHONE
LEFT
LINE IN
U105
U106
IN
OUT
S104
NR SYSTEM
DBX
DOLBY NR
S105
U107
BIAS TRAP
BIAS TRAP TP.L (R)
U108
OSC UNIT (100kHz)
ERASE HEAD
J3
J4
P3
P4
NORMAL
CO(CrO2)
METAL
TAPE SELECTOR
S103
Rch
12.1V
-12.0V

U101 (——)	NJM4560 D	Q101 (Q201)	KTN5014 (GR)	Q119 (Q219)	KTN5014 (GR)
U102 (U202)	TA7629P	Q102 (Q202)	KTN5014 (GR)	Q120 (Q220)	KTN5014 (GR)
U104 (——)	NJM4560 D	Q103 (Q203)	2SC2878 (B)		
U105	TC4069UBP	Q104 (——)	2SA1015 (GR)	Q302, Q303	2SA934 (Q)
U106 (——)	NJM4560D	Q105 (Q205)	KTN5014 (GR)	Q304, Q305	2SD1140
				Q306, Q307	2SA934 (Q)
		Q106 (Q206)	2SK68AL	Q308, Q309	2SD1140
		Q107 (Q207)	2SC1844 (F)		
		Q108 ~ Q116 (Q208 ~ Q216)	KTN5014		
		(Q209 : Not used)			
		Q117 (——)	2SD985		

NOTES

1. Schematic diagram shown for left channel unless otherwise noted. Number in parenthesis indicate right channel terminals.
2. All resistors are ¼W, ±5%, unless otherwise noted. Resistor values are in ohms (k=1,000 ohms, M=1,000,000 ohms).
3. Capacitor values are in microfarads (p=picofarads).
   (CE) : Ceramic
   (BP) : Bipolar
   All non-polarized capacitors are ±5% Mylar unless otherwise noted.
4. ⚠ Parts marked with this si
   They must always be replac
   the appropriate parts list and
5. Voltage and level values are fo
   0 dB=0.775V
6. ▭ : Front panel indicat
7. ⬚ : Rear panel indicati
8. ——— : +B power supply ci
9. ——— : –B power supply ci
10. A domestic, Japan, model of


5
6
7
8
9
10
U102
U104
PHONES
(-18dB/8Ω)
MIC AMPL PCB (2/2)
OUTPUT
(-3.0dB)
R13 20k(A)
Q103
Q104
(-5dB)
L OUTPUT
LEVEL METER PCB (B)
U109 IR-2E04
LEFT
(dB) -30 -20 -15 -10 -7 -5 -3 -2 -1 0 1 2 3 5 7 10
RIGHT
U209 IR-2E04
U210 1.5k x 7
LEVEL METER PCB (A)
U105
U106
Q105
Q117
U108 OSC UNIT (100kHz)
NORMAL 3.8V Co(CrO2) 6.8V METAL 10.0V
Q302
Q303
Q304
Q305
Q306
Q307
Q308
Q309
P502-1
P502-2
P502-3
P502-4
P502-5
P502-6
To dbx PCB
P501-7
P501-8
P501-9
P501-10
DBX LT-9000N
Q310, Q311 2SA934(Q)
Q312, Q313 2SC2060(Q)
MOTOR VR PCB (2/2)
MOTOR VR
STOP 4.65V DOWN 4.95V UP 0V
FADE SPEED
SLOW S108
FAST
R318 27
STOP 4.65V DOWN 0V UP 4.95V
VR IND.
Ⓐ CN6-1
Ⓑ CN6-2
Ⓒ CN6-3
Ⓓ CN6-4
Ⓔ CN6-5
To Control Section
5.0V +5V Ⓛ
POWER MUTE Ⓕ
12.2V +12V Ⓖ
12.1V +12V Ⓗ
0V Ⓘ
0V Ⓙ
-12.0V -12V Ⓚ
S106
S107
DOWN
UP
RECODING LEVEL
R/P PCB (1/2)

101(Q201)	KTN5014(GR)	Q119(Q219)	KTN5014(GR)	D101～D103 (D201～D203)	IS2473HJ
102(Q202)	KTN5014(GR)	Q120(Q220)	KTN5014(GR)	D104(——)	IS2473HJ
103(Q203)	2SC2878(B)			D105(D205)	IS2473HJ
104(——)	2SA1015(GR)	Q302, Q303	2SA934(Q)		
105(Q205)	KTN5014(GR)	Q304, Q305	2SD1140		
		Q306, Q307	2SA934(Q)	D9	IS2473HJ
106(Q206)	2SK68AL	Q308, Q309	2SD1140		
107(Q207)	2SC1844(F)				
108～Q116 208～Q216)	KTN5014				
209: Not used)					
117(——)	2SD985				

erwise noted.

ls.

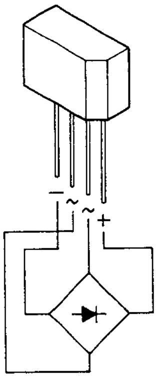
,000 ohms).

herwise noted.

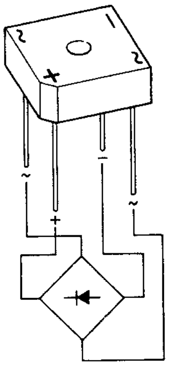
4. ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
5. Voltage and level values are for reference only. 0 dB=0.775V
6. ▭ : Front panel indication
7. ⬚ : Rear panel indication
8. ——— : +B power supply circuit
9. ——— : –B power supply circuit
10. A domestic, Japan, model of the V-95RX is the V-R1.

V-95RX Stereo Cassette Deck

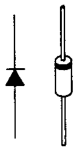
LBA-01



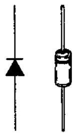
MBK3-02



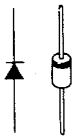
1N4002



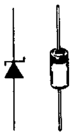
1S2473HJ



DS135
SM-1A-02LFA



HZ-3C1
HZ-7B2L
WZ-042
GZA-9.1L



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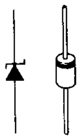

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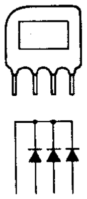

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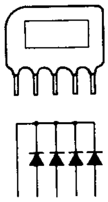

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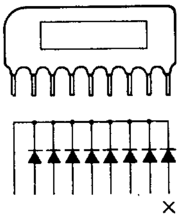

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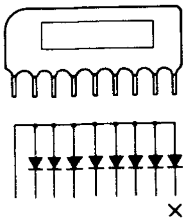
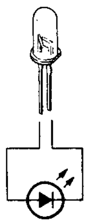


GL-5PR6
GL-5NG10



GL-9NG10